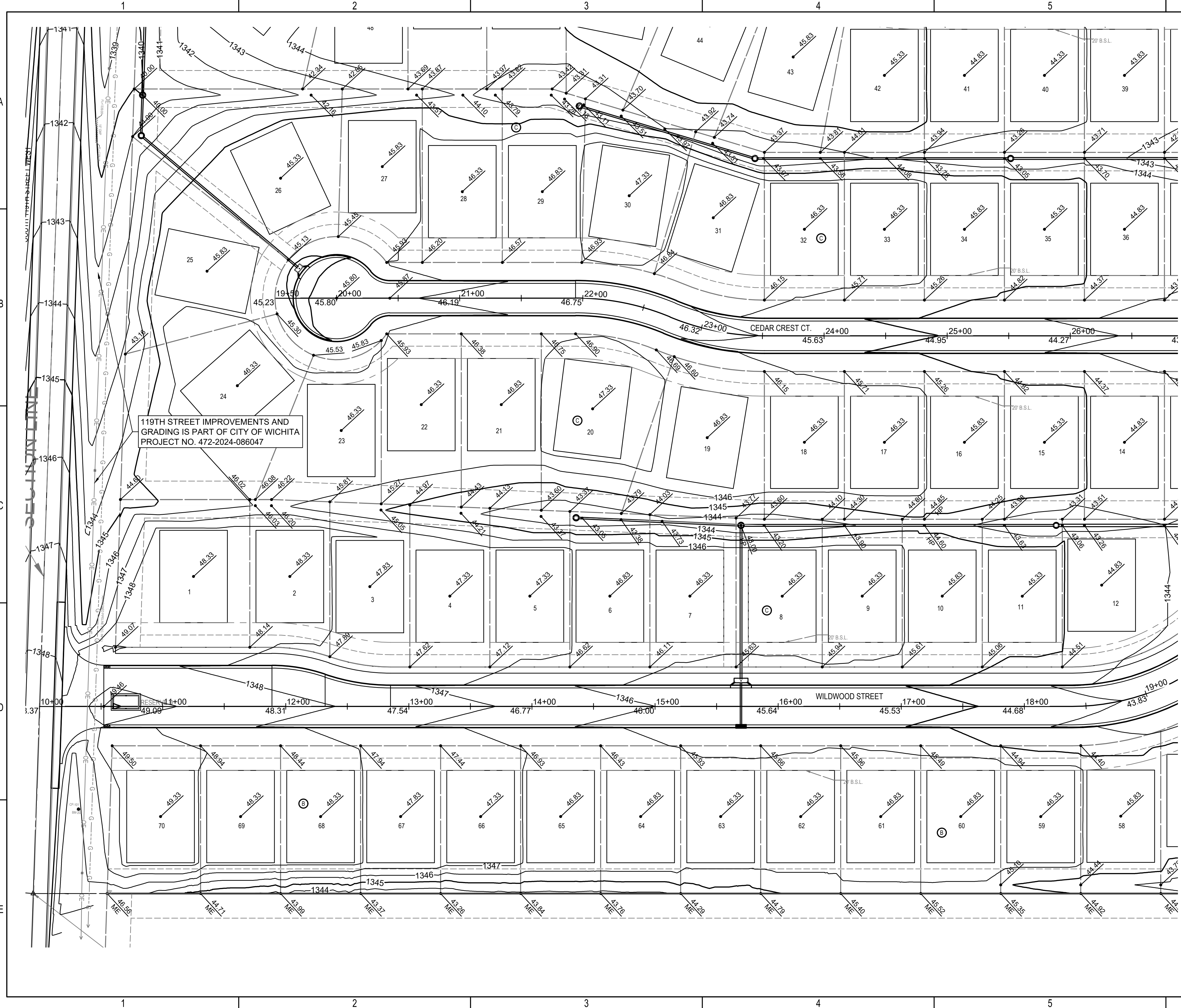
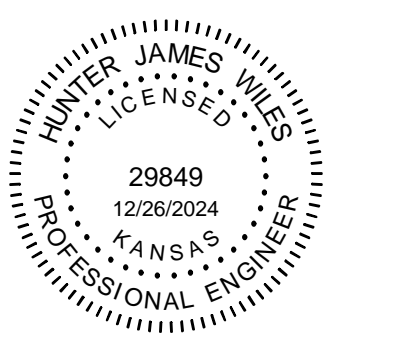
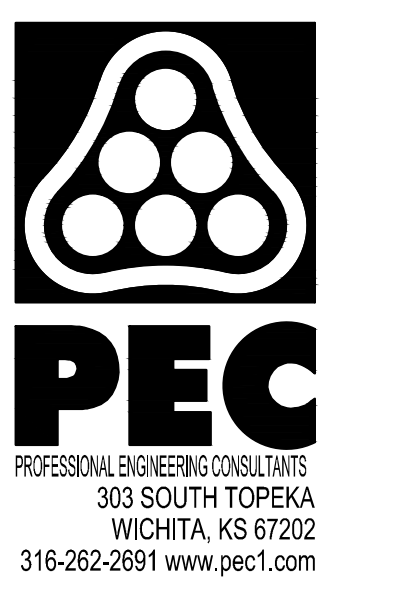
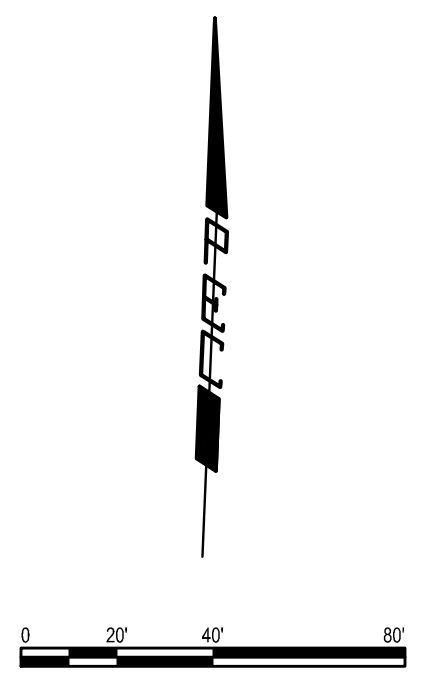


SAVED 12/26/2024 3:36:32 PM BY HUNTER WILES
 PLOTTED 12/26/2024 3:51:47 PM BY BRADLEY HAYNES
 U:\WICHITA-CIVIL\2023\230656\02\2PD4_PLANS\03\01\WD\230656-CG108-MASS GRADING.DWG



119TH STREET IMPROVEMENTS AND GRADING IS PART OF CITY OF WICHITA PROJECT NO. 472-2024-086047

CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.



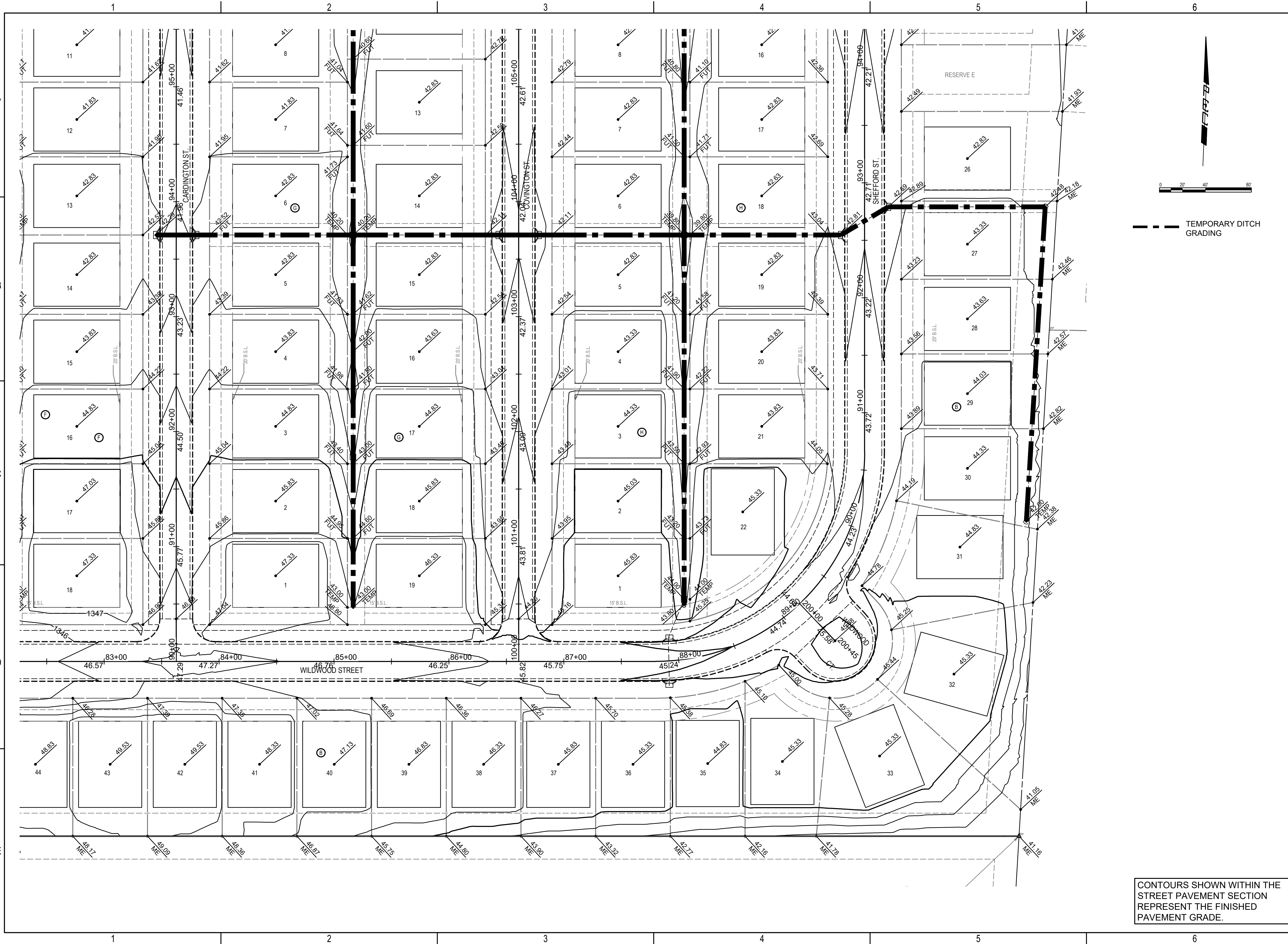
STORMWATER DRAIN #530
 TO SERVE
BRIDGER PAWNEE ADDITION
 CITY OF WICHITA, KANSAS
 PAUL GUNZELMAN, P.E. - CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 458-2024-085576

Issue:	
JOB NO.	230656-006
DATE	DECEMBER 2024
PM	KPG
DESIGNED BY	HJW
DRAWN BY	BJS
CHECKED BY	KMS

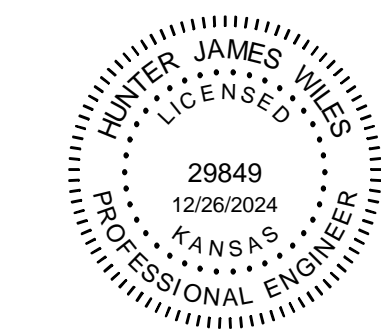
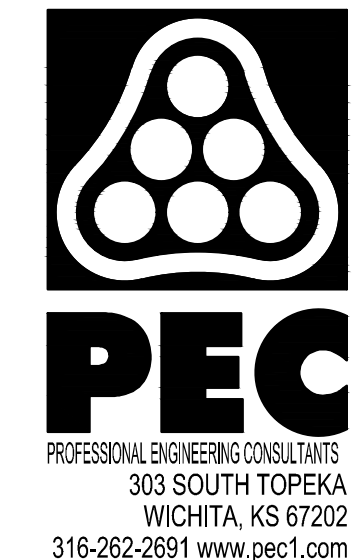
GRADING - AREA 1

CG102
 6 OF 26

SAVED 12/26/2024 3:36:32 PM BY HUNTER WILES
 PLOTTED 12/26/2024 3:51:52 PM BY BRADLEY HAYNES
 U:\WICHITA-CIVIL\2023\230656\02\2PD4_PLANS\03\01\WD\230656-CG108-MASS GRADING.DWG



CONTOURS SHOWN WITHIN THE
 STREET PAVEMENT SECTION
 REPRESENT THE FINISHED
 PAVEMENT GRADE.



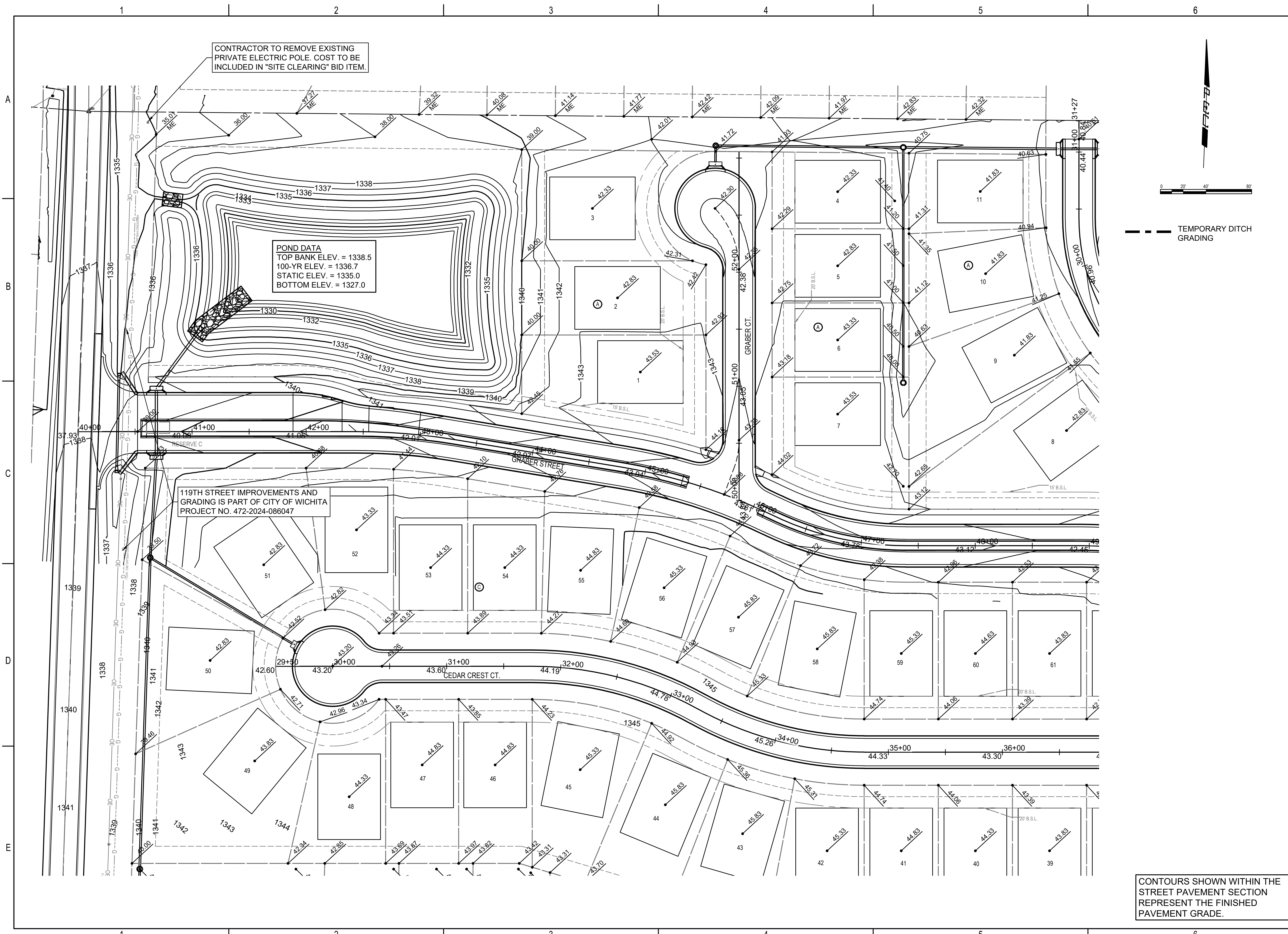
STORMWATER DRAIN #530
 TO SERVE
BRIDGER PAWNEE ADDITION
 CITY OF WICHITA, KANSAS
 PAUL GUNZELMAN, P.E., CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 458-2024-085576

Issue:	
JOB NO.	230656-006
DATE	DECEMBER 2024
PM	KPG
DESIGNED BY	HJW
DRAWN BY	BJS
CHECKED BY	KMS

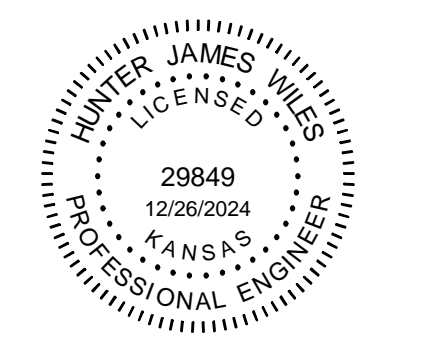
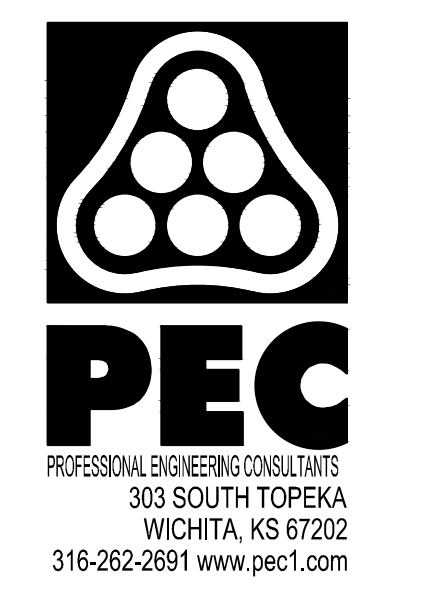
GRADING - AREA 3

CG104
 8 OF 26

SAVED 12/26/2024 3:36:32 PM BY HUNTER WILES
 PLOTTED 12/26/2024 3:51:54 PM BY BRADLEY HAYNES
 U:\WICHITA-CIVIL\2023\230656\02\2PD4_PLANS\03\WD\230656-CG108-MASS GRADING.DWG



CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.



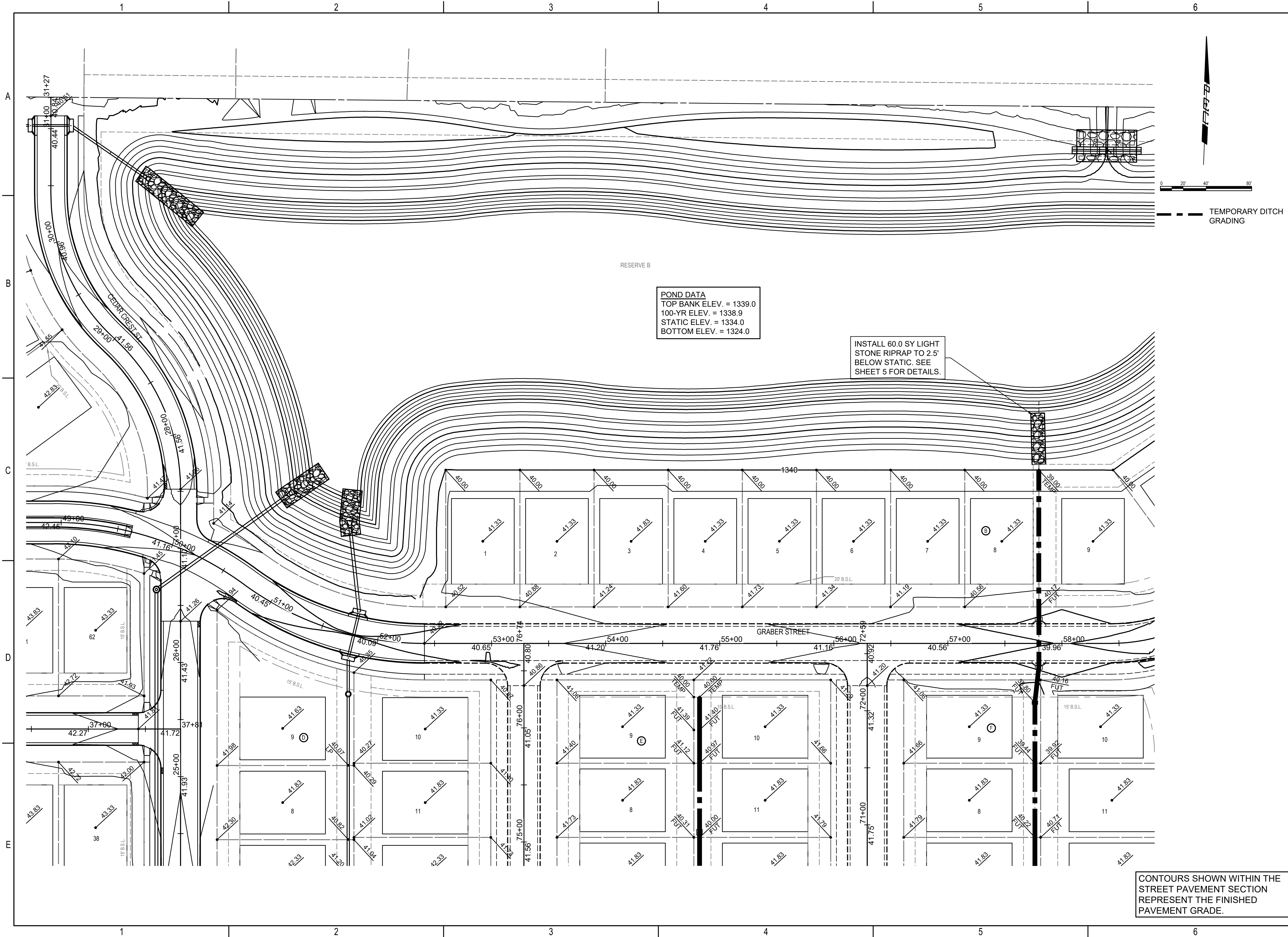
STORMWATER DRAIN #530
 TO SERVE
BRIDGER PAWNEE ADDITION
 CITY OF WICHITA, KANSAS
 PAUL GUNZELMAN, P.E.-CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 458-2024-085576

Issue:		

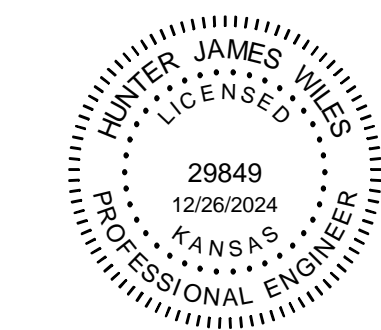
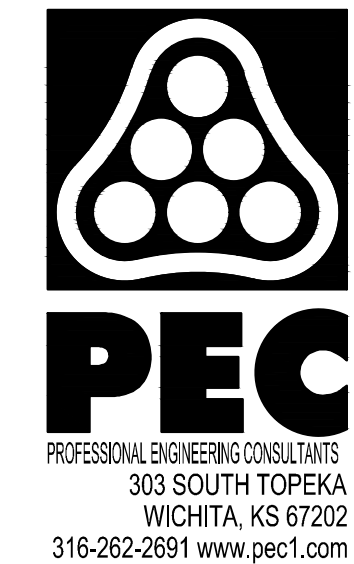
JOB NO.	230656-006
DATE	DECEMBER 2024
PM	KPG
DESIGNED BY	HJW
DRAWN BY	BJS
CHECKED BY	KMS

GRADING - AREA 4

SAVED 12/26/2024 3:36:32 PM BY HUNTER WILES
 PLOTTED 12/26/2024 3:51:58 PM BY BRADLEY HAYNES
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CONTOURS SHOWN WITHIN THE STREET PAVEMENT SECTION REPRESENT THE FINISHED PAVEMENT GRADE.



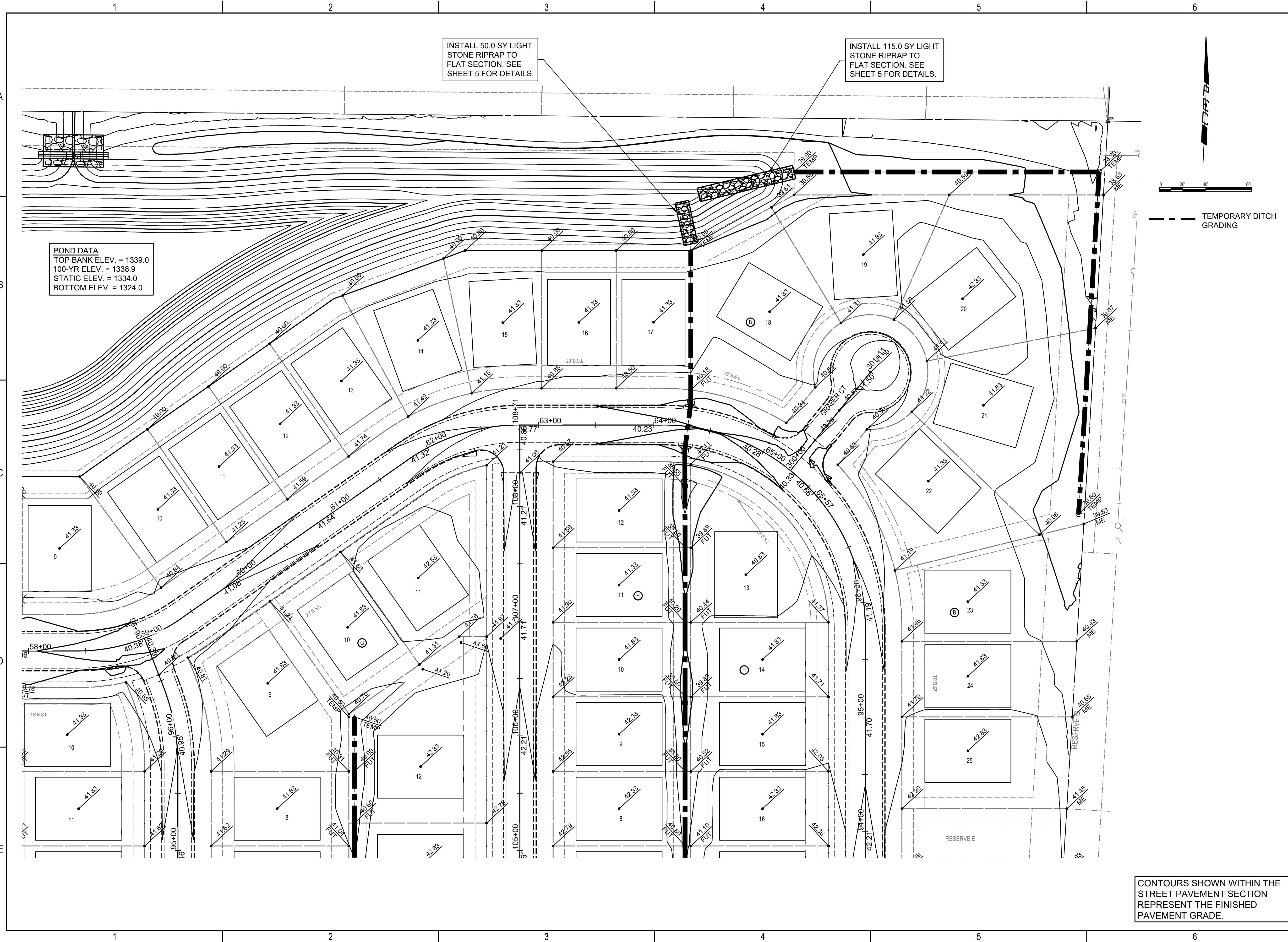
STORMWATER DRAIN #530
 TO SERVE
BRIDGER PAWNEE ADDITION
 CITY OF WICHITA, KANSAS
 PAUL GUNZELMAN, P.E.-CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 458-2024-085576

Issue:	

JOB NO.	230656-006
DATE	DECEMBER 2024
PM	KPG
DESIGNED BY	HJW
DRAWN BY	BJS
CHECKED BY	KMS

GRADING - AREA 5
CG106
 10 OF 26

SAVED 12/26/2024 3:36:32 PM BY HUNTER WILES
 PLOTTED 12/26/2024 3:52:01 PM BY BRADLEY HAYNES
 U:\WICHITA-CIVIL\2023\230656\02\2PD4_PLANS\03\01\WD\230656-CG108-MASS GRADING.DWG



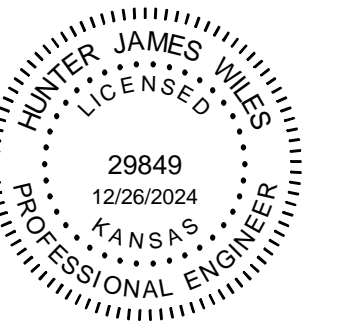
INSTALL 50.0 SY LIGHT
 STONE RIPRAP TO
 FLAT SECTION. SEE
 SHEET 5 FOR DETAILS.

INSTALL 115.0 SY LIGHT
 STONE RIPRAP TO
 FLAT SECTION. SEE
 SHEET 5 FOR DETAILS.

POND DATA
 TOP BANK ELEV. = 1339.0
 100-YR ELEV. = 1338.9
 STATIC ELEV. = 1334.0
 BOTTOM ELEV. = 1324.0

--- TEMPORARY DITCH
 GRADING

CONTOURS SHOWN WITHIN THE
 STREET PAVEMENT SECTION
 REPRESENT THE FINISHED
 PAVEMENT GRADE.



STORMWATER DRAIN #530
 TO SERVE
BRIDGER PAWNEE ADDITION
 CITY OF WICHITA, KANSAS
 PAUL GUNZELMAN, P.E. - CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 458-2024-085576

Issue:	
JOB NO.	230656-006
DATE	DECEMBER 2024
PM	KPG
DESIGNED BY	HJW
DRAWN BY	BJS
CHECKED BY	KMS

GRADING - AREA 6

CG107
 11 OF 26

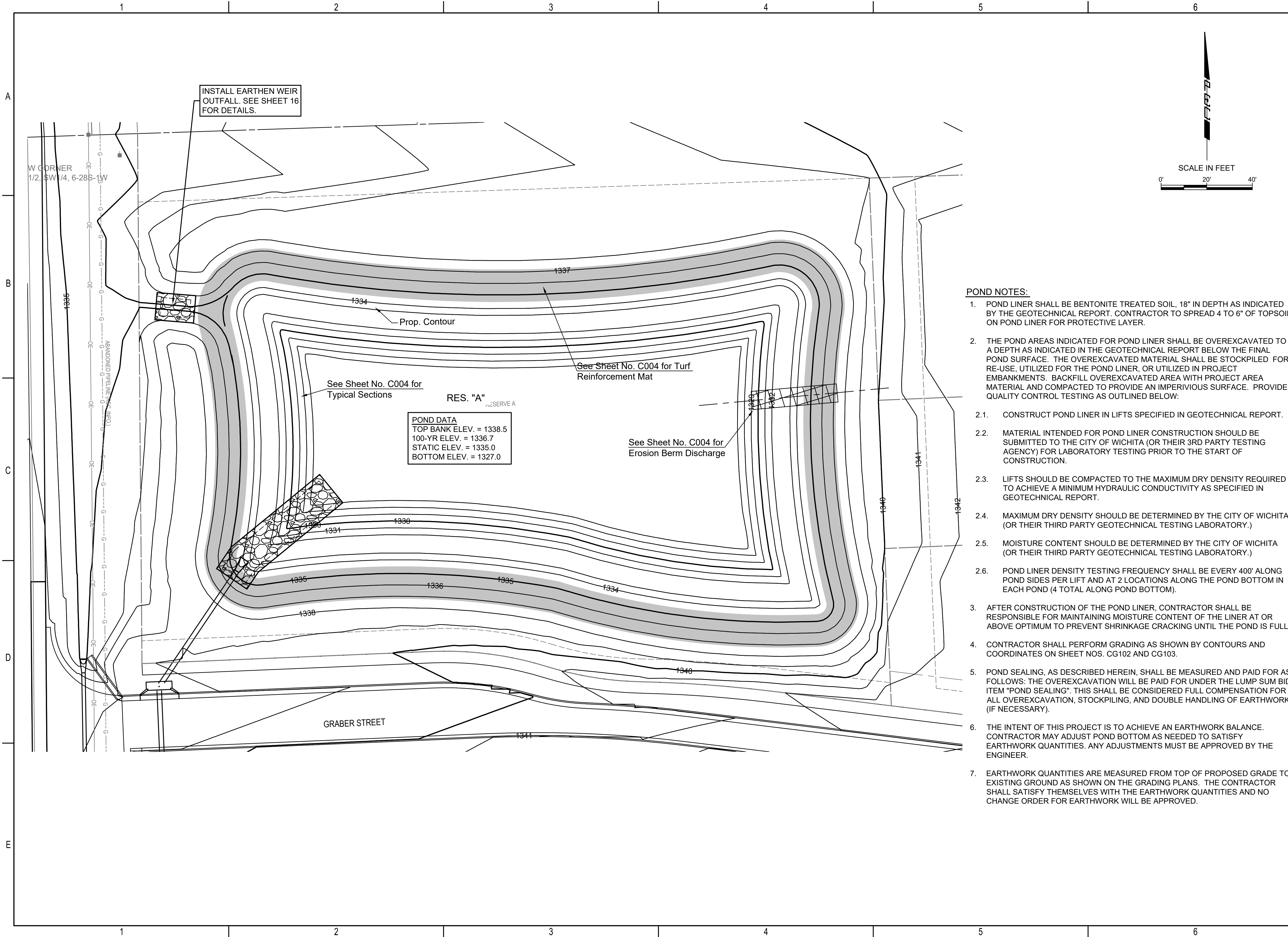
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	Northing	Easting			Elev.	Elev.	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349
1A	354658.43	17506141.43	1341.56	1343.53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2A	354722.53	17506118.70	1341.17	1342.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3A	354799.97	17506093.45	1340.97	1342.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9A	354521.91	17506911.09	1337.90	1340.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10A	354524.63	17506976.03	1338.57	1341.13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11A	354527.36	17507040.97	1338.30	1341.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1B	354530.10	17507105.91	1338.18	1341.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2B	354532.87	17507170.85	1338.27	1340.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3B	354535.56	17507235.80	1339.08	1340.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4B	354538.30	17507300.74	1338.72	1340.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5B	354541.03	17507365.68	1338.55	1340.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6B	354544.39	17507445.61	1338.30	1340.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7B	354581.92	17507529.76	1338.25	1340.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8B	354621.38	17507581.41	1338.24	1340.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9B	354660.86	17507633.05	1338.12	1341.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10B	354700.35	17507684.68	1338.17	1340.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11B	354738.64	17507749.88	1338.10	1340.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12B	354757.06	17507823.19	1338.21	1340.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13B	354760.22	17507889.44	1338.05	1340.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14B	354762.95	17507954.38	1337.94	1340.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15B	354776.45	17508055.07	1338.08	1341.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16B	354829.52	17508134.54	1337.61	1341.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17B	354794.77	17508222.61	1338.23	1342.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18B	354702.68	17508244.60	1338.12	1341.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19B	354634.70	17508199.45	1338.45	1341.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20B	354531.15	17508238.37	1339.51	1341.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21B	354466.21	17508241.10	1339.72	1341.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22B	354401.27	17508243.83	1340.10	1342.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23B	354251.90	17508250.11	1340.93	1342.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24B	354177.46	17508253.24	1341.75	1343.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
25B	354112.52	17508255.97	1341.91	1343.63	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
26B	354047.58	17508258.74	1341.82	1344.03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27B	353982.64	17508261.47	1342.09	1344.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
28B	353913.96	17508257.80	1342.10	1344.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
29B	353803.29	17508257.27	1341.23	1345.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
30B	353729.36	17508195.57	1341.47	1345.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
31B	353721.06	17508111.30	1341.70	1345.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
32B	353716.59	17508046.43	1341.97	1344.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
33B	353713.17	17507981.51	1342.42	1345.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
34B	353710.44	17507916.57	1343.11	1345.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
35B	353707.71	17507851.62	1343.89	1346.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
36B	353704.97	17507786.68	1344.75	1346.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
37B	353702.24	17507721.74	1346.07	1347.13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
38B	353699.51	17507656.80	1347.43	1348.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
39B	353696.78	17507591.85	1348.37	1349.53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
40B	353694.06	17507526.91	1347.19	1349.53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
41B	353691.33	17507461.97	1345.80	1348.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
42B	353688.60	17507397.03	1345.02	1347.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
43B	353686.50	17507332.06	1344.37	1346.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
44B	353700.06	17507266.43	1343.84	1346.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
45B	353692.07	17507201.71	1343.90	1346.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
46B	353677.69	17507137.25	1343.45	1345.93	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
47B	353674.94	17507072.31	1343.36	1345.53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
48B	353672.17	17507007.37	1343.31	1345.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
49B	353669.48	17506942.43	1342.79	1345.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
50B	353666.71	17506877.49	1342.61	1345.03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
51B	353664.01	17506812.54	1342.86	1344.63	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
52B	353661.25	17506747.60	1342.66	1345.03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
53B	353658.93	17506682.22	1343.00	1345.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
54B	353656.30	17506604.18	1343.01	1345.63	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
55B	353652.86	17506539.77	1343.30	1345.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
56B	353649.78	17506474.84	1343.84	1346.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
57B	353647.09	17506409.90	1344.59	1346.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
58B	353644.32	17506344.96	1344.62	1346.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

X = TEST IS NOT REQUIRED

EXCAVATION ELEVATION INCLUDES TOP SOIL STRIPPING.

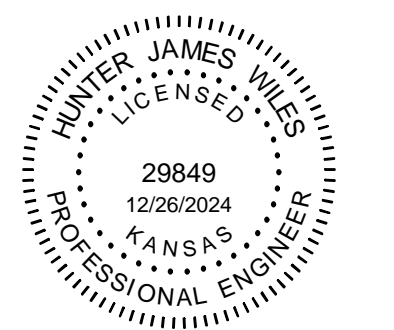
Lot	Location		Exc.	Fill	Compaction % and Test Elevation														
	Northing	Easting			Elev.	Elev.	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349
59B	353641.59	17506280.01	1344.62	1346.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
60B	353638.90	17506215.07	1344.13	1346.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
61B	353636.17	17506150.13	1343.68	1346.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
62B	353633.44	17506085.18	1343.60	1346.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
63B	353630.66	17506020.24	1343.62	1347.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
64B	353627.97	17505955.30	1343.52	1347.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
65B	353625.20	17505890.36	1343.70	1348.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
66B	353622.47	17505825.42	1344.11	1348.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
67B	353619.78	17505760.47	1345.04	1349.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1C	353815.73	17505779.01	1344.47	1348.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2C	353819.02	17505857.19	1344.87	1348.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3C	353813.50	17505922.48	1345.25	1347.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4C	353808.49	17505987.74	1345.77	1347.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5C	353811.26	17506052.69	1345.42	1347.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6C	353813.99	17506117.63	1344.85	1346.83	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7C	353816.72	17506182.57	1344.10	1346.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8C	353819.83	17506257.51	1343.91	1346.33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9C	353822.56	17506322.45	1343.86	1346.33	X	X	X												

SAVED 12/24/2024 6:43:57 AM BY HUNTER WILES
 PLOTTED 12/26/2024 1:44:20 PM BY HUNTER WILES
 U:\WICHITA-CIVIL\2023\230656\002\2PD4_PLANS\030\SWD\230656-006-CG201 POND PLANS.DWG



POND NOTES:

1. POND LINER SHALL BE BENTONITE TREATED SOIL, 18" IN DEPTH AS INDICATED BY THE GEOTECHNICAL REPORT. CONTRACTOR TO SPREAD 4 TO 6" OF TOPSOIL ON POND LINER FOR PROTECTIVE LAYER.
2. THE POND AREAS INDICATED FOR POND LINER SHALL BE OVEREXCAVATED TO A DEPTH AS INDICATED IN THE GEOTECHNICAL REPORT BELOW THE FINAL POND SURFACE. THE OVEREXCAVATED MATERIAL SHALL BE STOCKPILED FOR RE-USE, UTILIZED FOR THE POND LINER, OR UTILIZED IN PROJECT EMBANKMENTS. BACKFILL OVEREXCAVATED AREA WITH PROJECT AREA MATERIAL AND COMPACTED TO PROVIDE AN IMPERVIOUS SURFACE. PROVIDE QUALITY CONTROL TESTING AS OUTLINED BELOW:
 - 2.1. CONSTRUCT POND LINER IN LIFTS SPECIFIED IN GEOTECHNICAL REPORT.
 - 2.2. MATERIAL INTENDED FOR POND LINER CONSTRUCTION SHOULD BE SUBMITTED TO THE CITY OF WICHITA (OR THEIR 3RD PARTY TESTING AGENCY) FOR LABORATORY TESTING PRIOR TO THE START OF CONSTRUCTION.
 - 2.3. LIFTS SHOULD BE COMPACTED TO THE MAXIMUM DRY DENSITY REQUIRED TO ACHIEVE A MINIMUM HYDRAULIC CONDUCTIVITY AS SPECIFIED IN GEOTECHNICAL REPORT.
 - 2.4. MAXIMUM DRY DENSITY SHOULD BE DETERMINED BY THE CITY OF WICHITA (OR THEIR THIRD PARTY GEOTECHNICAL TESTING LABORATORY.)
 - 2.5. MOISTURE CONTENT SHOULD BE DETERMINED BY THE CITY OF WICHITA (OR THEIR THIRD PARTY GEOTECHNICAL TESTING LABORATORY.)
 - 2.6. POND LINER DENSITY TESTING FREQUENCY SHALL BE EVERY 400' ALONG POND SIDES PER LIFT AND AT 2 LOCATIONS ALONG THE POND BOTTOM IN EACH POND (4 TOTAL ALONG POND BOTTOM).
3. AFTER CONSTRUCTION OF THE POND LINER, CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING MOISTURE CONTENT OF THE LINER AT OR ABOVE OPTIMUM TO PREVENT SHRINKAGE CRACKING UNTIL THE POND IS FULL.
4. CONTRACTOR SHALL PERFORM GRADING AS SHOWN BY CONTOURS AND COORDINATES ON SHEET NOS. CG102 AND CG103.
5. POND SEALING, AS DESCRIBED HEREIN, SHALL BE MEASURED AND PAID FOR AS FOLLOWS: THE OVEREXCAVATION WILL BE PAID FOR UNDER THE LUMP SUM BID ITEM "POND SEALING". THIS SHALL BE CONSIDERED FULL COMPENSATION FOR ALL OVEREXCAVATION, STOCKPILING, AND DOUBLE HANDLING OF EARTHWORK (IF NECESSARY).
6. THE INTENT OF THIS PROJECT IS TO ACHIEVE AN EARTHWORK BALANCE. CONTRACTOR MAY ADJUST POND BOTTOM AS NEEDED TO SATISFY EARTHWORK QUANTITIES. ANY ADJUSTMENTS MUST BE APPROVED BY THE ENGINEER.
7. EARTHWORK QUANTITIES ARE MEASURED FROM TOP OF PROPOSED GRADE TO EXISTING GROUND AS SHOWN ON THE GRADING PLANS. THE CONTRACTOR SHALL SATISFY THEMSELVES WITH THE EARTHWORK QUANTITIES AND NO CHANGE ORDER FOR EARTHWORK WILL BE APPROVED.



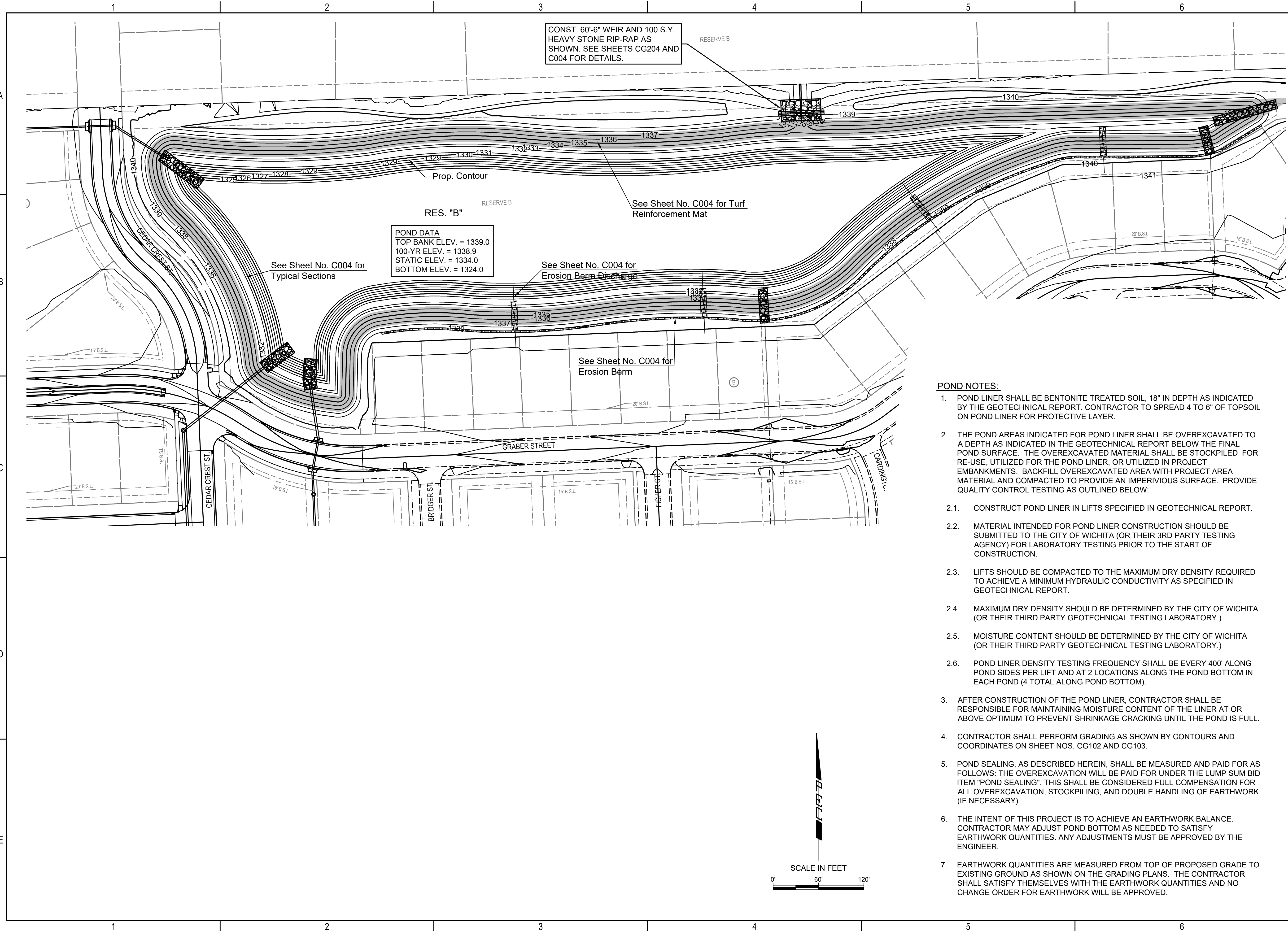
STORMWATER DRAIN #530
 TO SERVE
BRIDGER PAWNEE ADDITION
 CITY OF WICHITA, KANSAS
 PAUL GUNZELMAN, P.E.-CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 458-2024-085576

Issue:		

JOB NO.	230656-006
DATE	DECEMBER 2024
PM	KPG
DESIGNED BY	HJW
DRAWN BY	BJS
CHECKED BY	KMS

POND PLAN - WEST

SAVED 12/24/2024 6:43:57 AM BY HUNTER WILES
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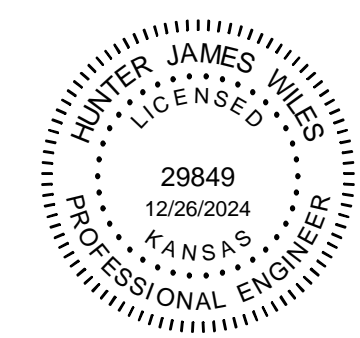
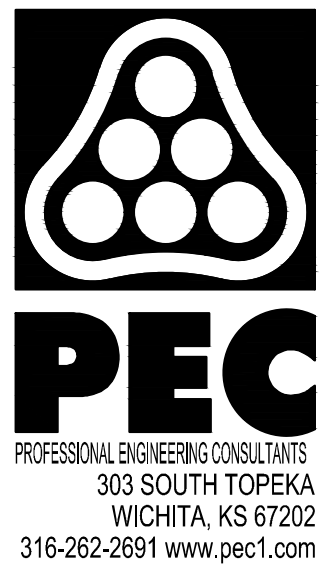
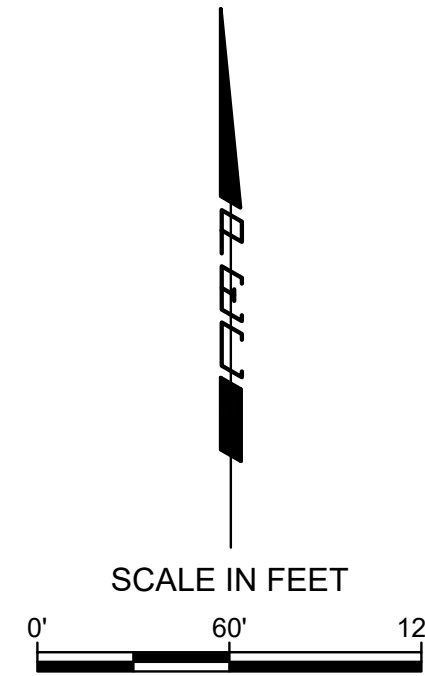


CONST. 60'-6" WEIR AND 100 S.Y. HEAVY STONE RIP-RAP AS SHOWN. SEE SHEETS CG204 AND C004 FOR DETAILS.

POND DATA
 TOP BANK ELEV. = 1339.0
 100-YR ELEV. = 1338.9
 STATIC ELEV. = 1334.0
 BOTTOM ELEV. = 1324.0

POND NOTES:

- POND LINER SHALL BE BENTONITE TREATED SOIL, 18" IN DEPTH AS INDICATED BY THE GEOTECHNICAL REPORT. CONTRACTOR TO SPREAD 4 TO 6" OF TOPSOIL ON POND LINER FOR PROTECTIVE LAYER.
- THE POND AREAS INDICATED FOR POND LINER SHALL BE OVEREXCAVATED TO A DEPTH AS INDICATED IN THE GEOTECHNICAL REPORT BELOW THE FINAL POND SURFACE. THE OVEREXCAVATED MATERIAL SHALL BE STOCKPILED FOR RE-USE, UTILIZED FOR THE POND LINER, OR UTILIZED IN PROJECT EMBANKMENTS. BACKFILL OVEREXCAVATED AREA WITH PROJECT AREA MATERIAL AND COMPACTED TO PROVIDE AN IMPERVIOUS SURFACE. PROVIDE QUALITY CONTROL TESTING AS OUTLINED BELOW:
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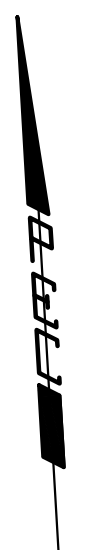
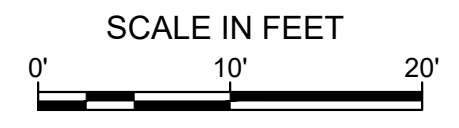
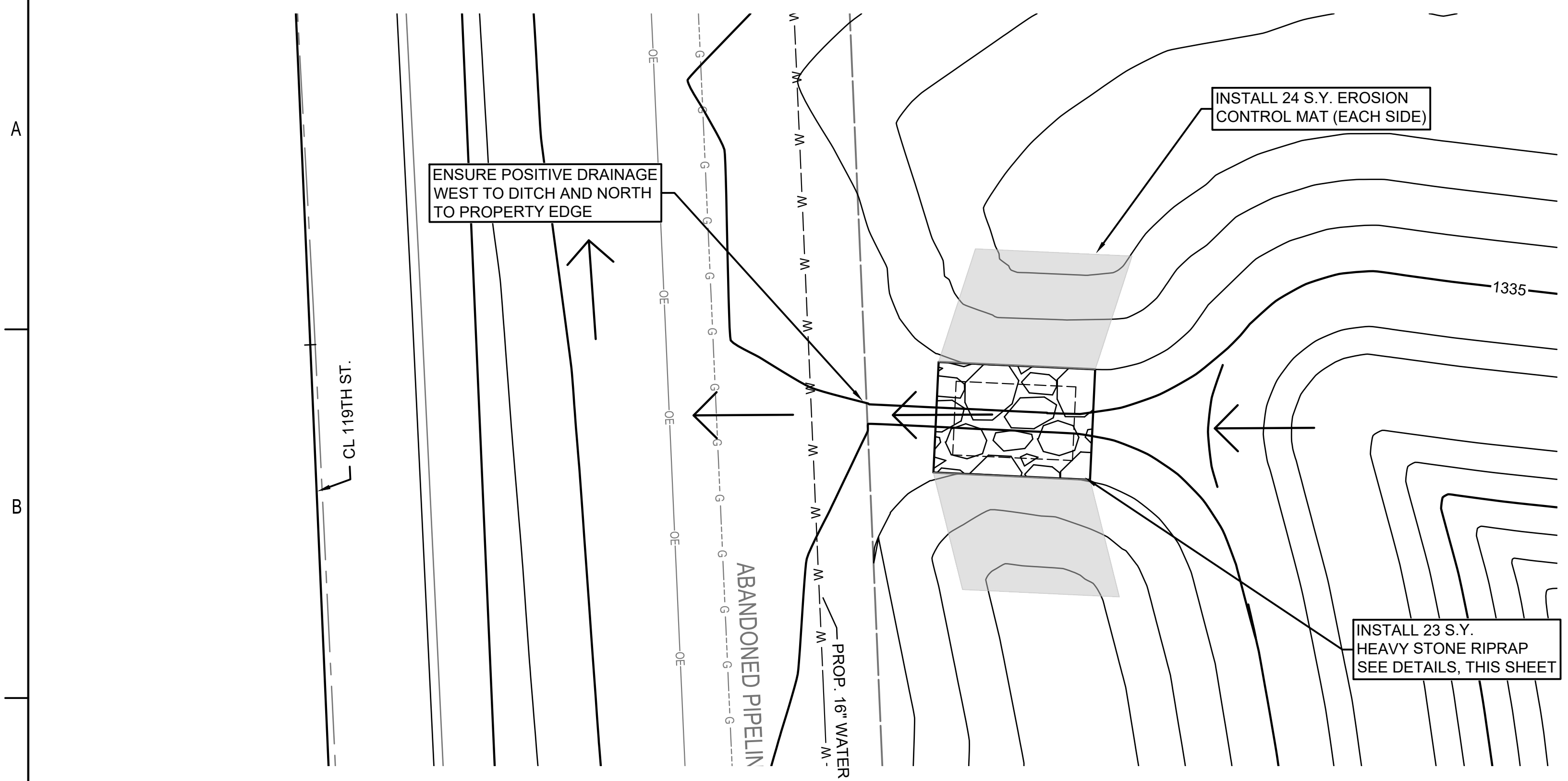


STORMWATER DRAIN #530
 TO SERVE
BRIDGER PAWNEE ADDITION
 CITY OF WICHITA, KANSAS
 PAUL GUNZELMAN, P.E. - CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 458-2024-085576

Issue:		
JOB NO.	230656-006	
DATE	DECEMBER 2024	
PM	KPG	
DESIGNED BY	HJW	
DRAWN BY	BJS	
CHECKED BY	KMS	

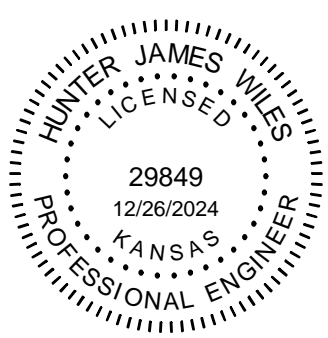
POND PLAN - EAST

1 2 3 4 5 6



▲ TURF REINFORCEMENT MAT SHALL BE EAST COAST EROSION "ECSC-3" OR APPROVED EQUIVALENT. EQUIVALENT MUST INCLUDE PRODUCT WARRANTY EQUAL TO THAT OF EAST COAST EROSION. INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

PAID FOR AS S.Y. "BMP, EROSION CONTROL MAT" AS INDICATED ON POND GRADING PLAN. THE BID PRICE SHALL BE CONSIDERED FULL COMPENSATION FOR ALL MATERIALS, LABOR, EQUIPMENT, TOOLS, AND INCIDENTS NECESSARY TO COMPLETE WORK.



STORMWATER DRAIN #530 TO SERVE
BRIDGER PAWNEE ADDITION
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 PAUL GUNZELMAN, P.E. - CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 458-2024-085576

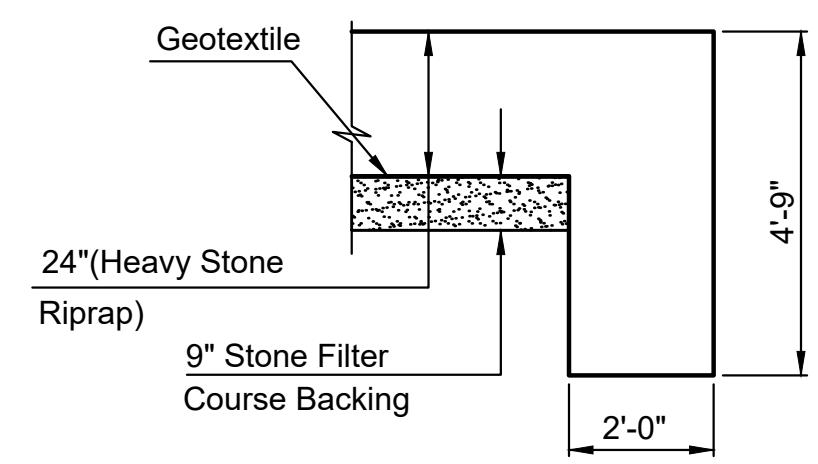
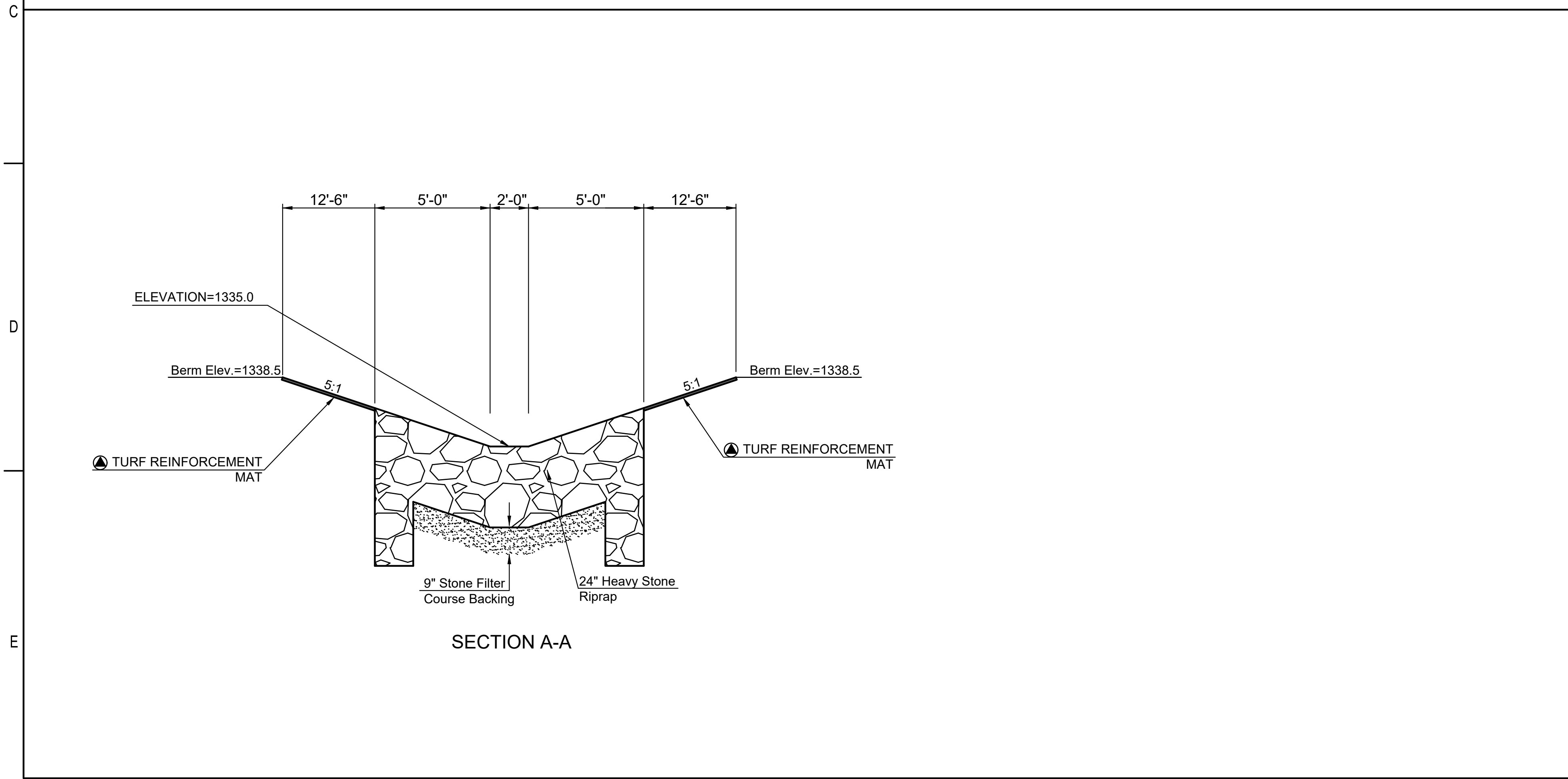
Issue:		

JOB NO.	230656-006
DATE	DECEMBER 2024
PM	KPG
DESIGNED BY	HJW
DRAWN BY	BJS
CHECKED BY	KMS

POND OUTFALL - WEST

CG203
16 OF 26

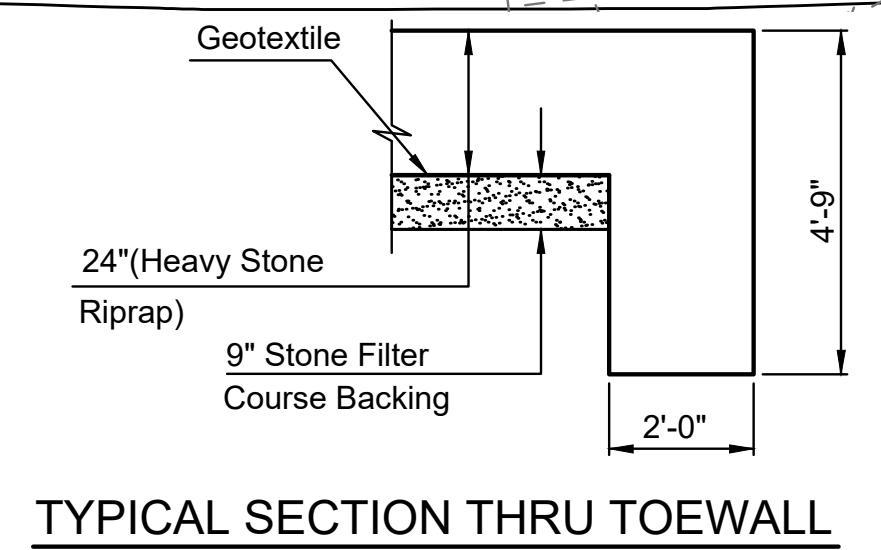
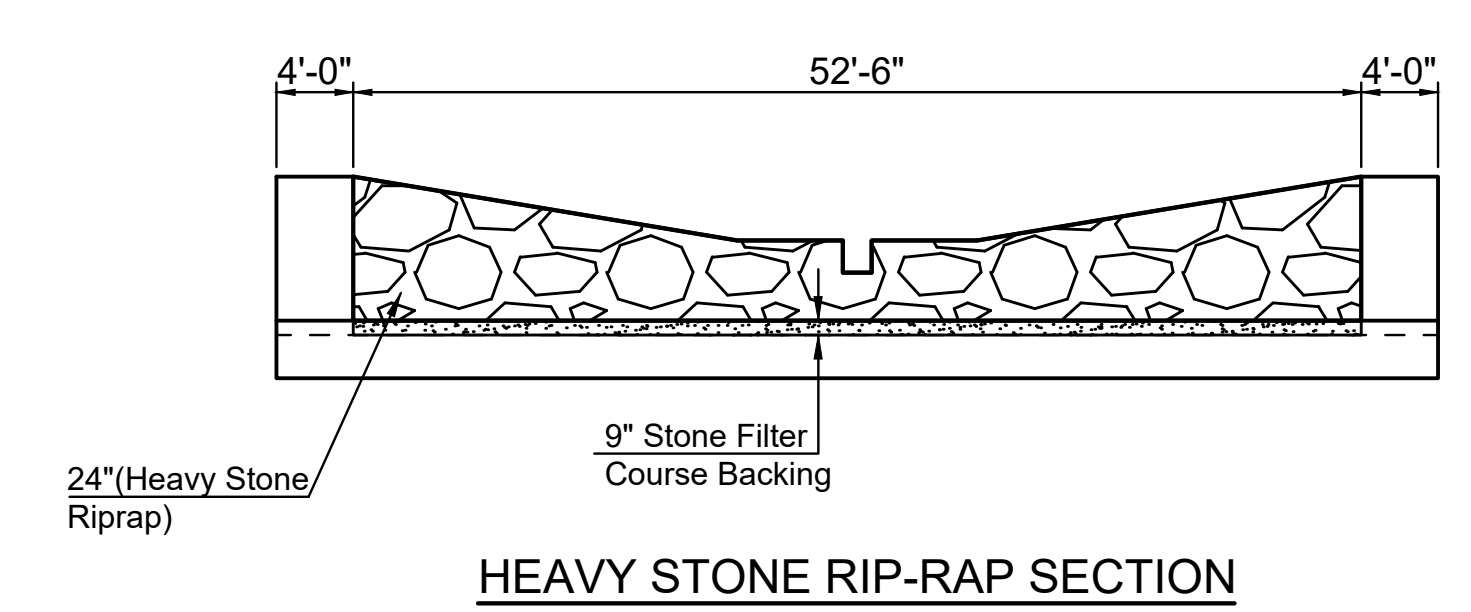
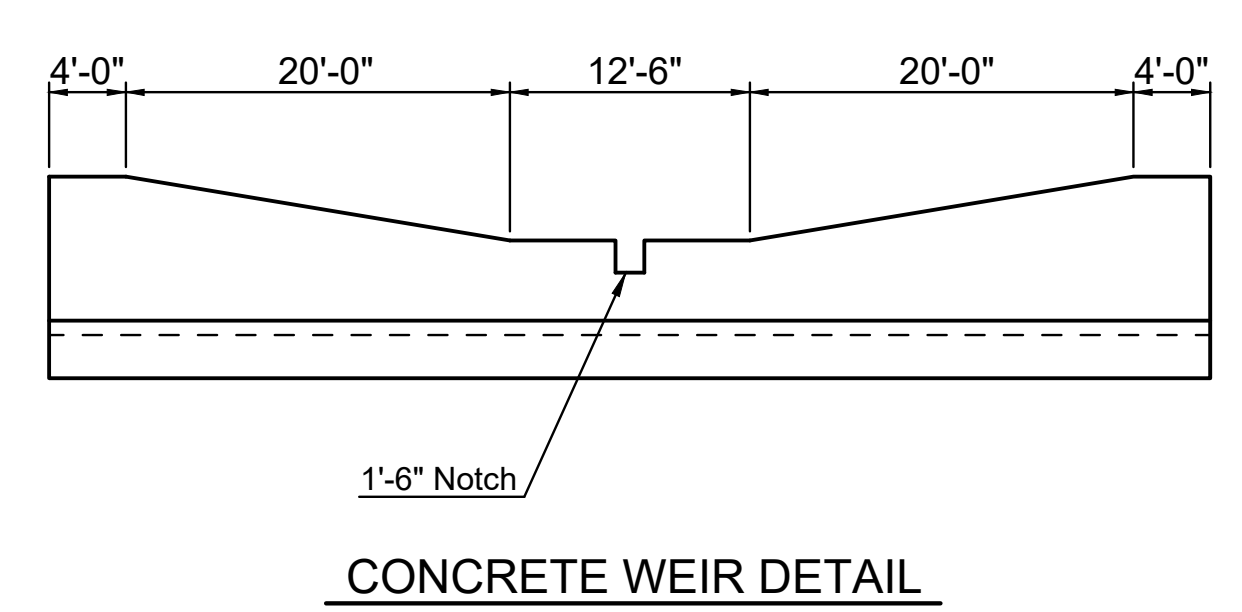
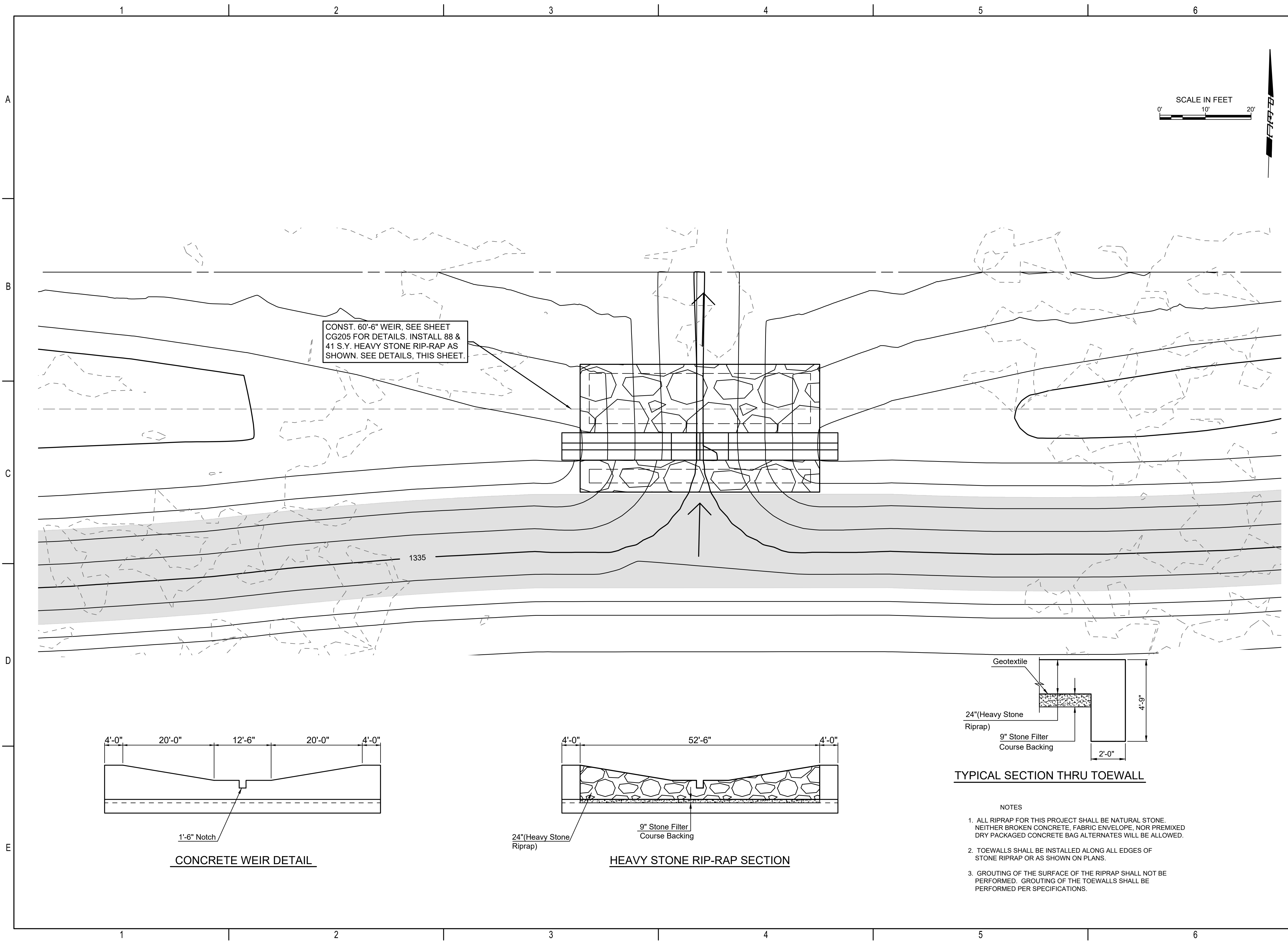
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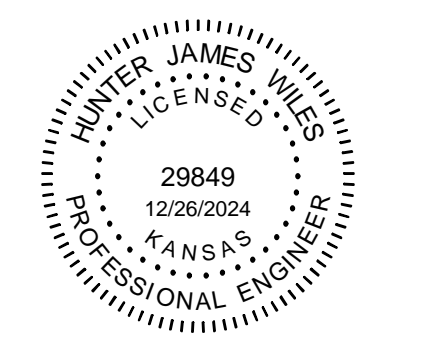
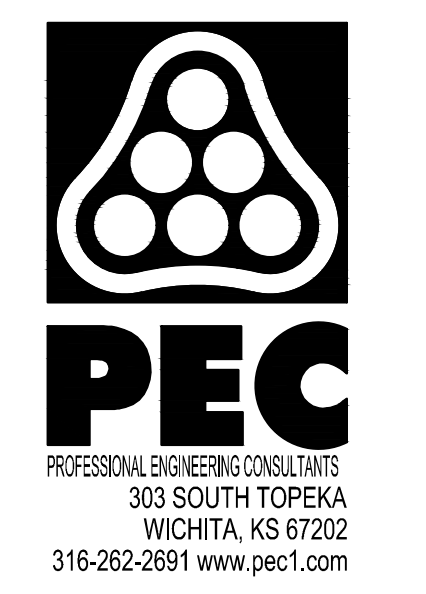
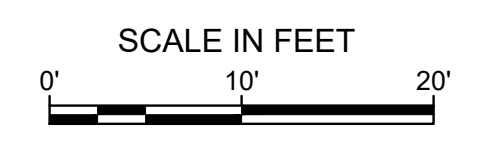
TYPICAL SECTION THRU TOEWALL
NO SCALE

- NOTES
1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED.
 2. TOEWALLS SHALL BE INSTALLED ALONG ALL EDGES OF STONE RIPRAP OR AS SHOWN ON PLANS.
 3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER SPECIFICATIONS.

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- NOTES**
- ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED.
 - TOEWALLS SHALL BE INSTALLED ALONG ALL EDGES OF STONE RIPRAP OR AS SHOWN ON PLANS.
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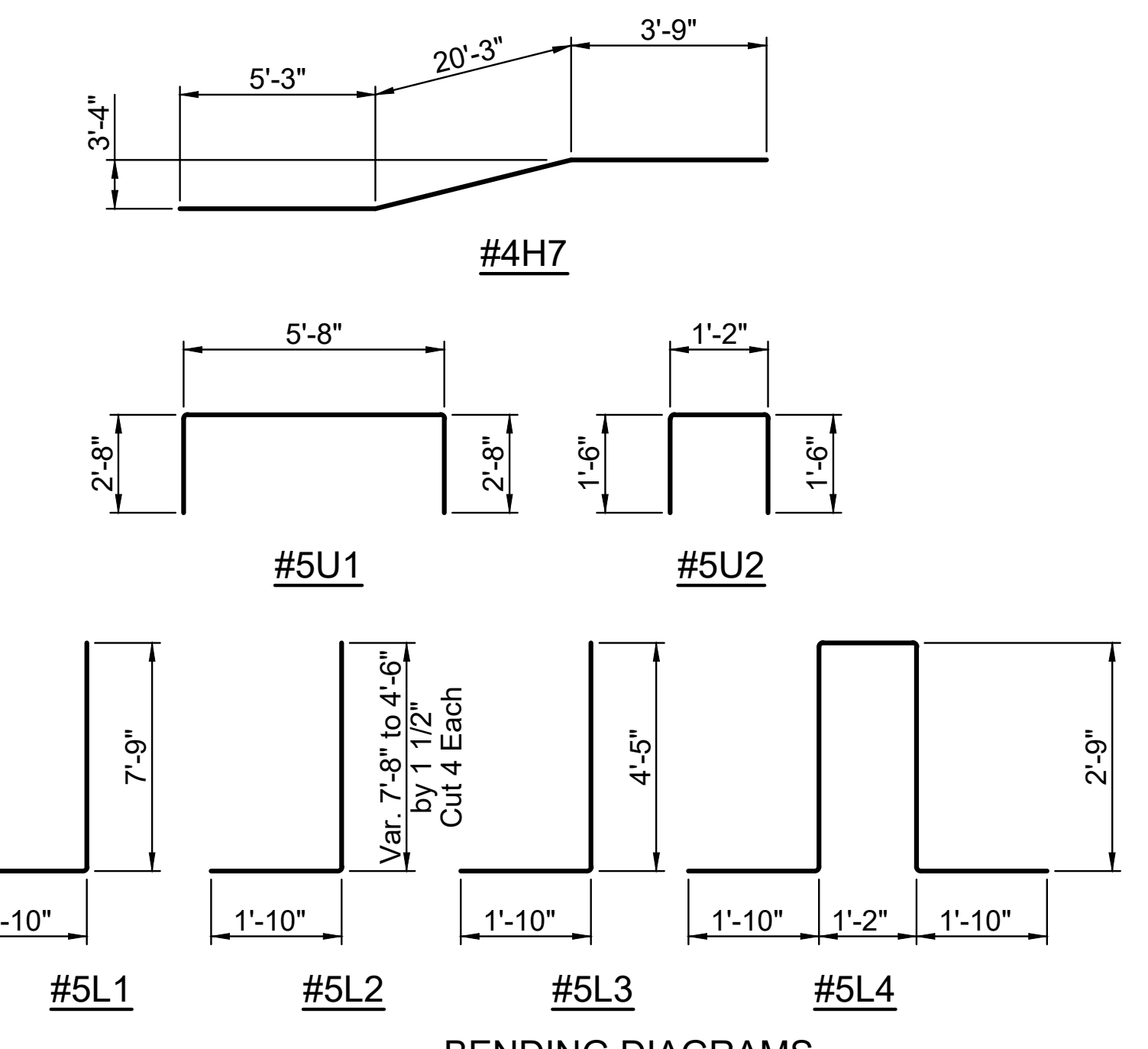
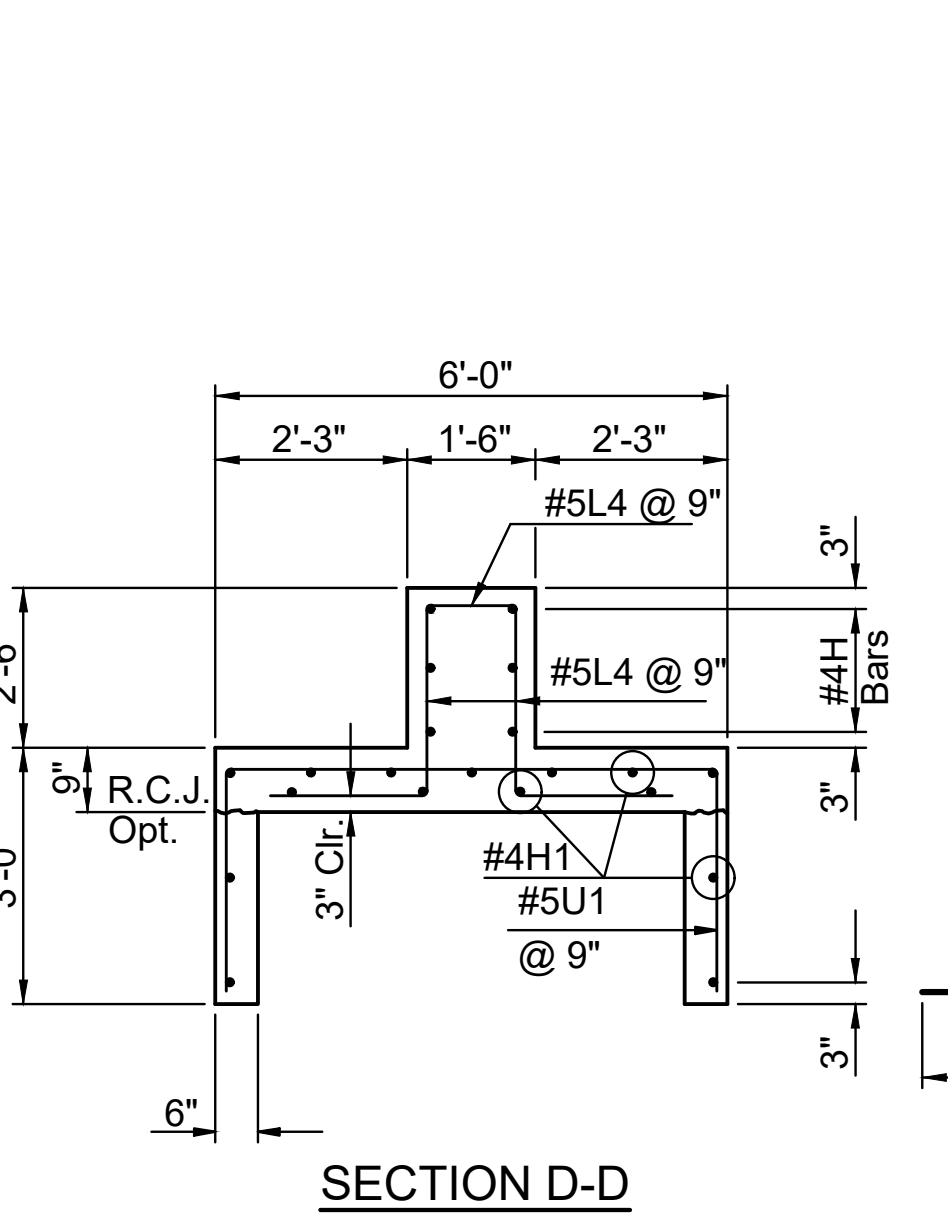
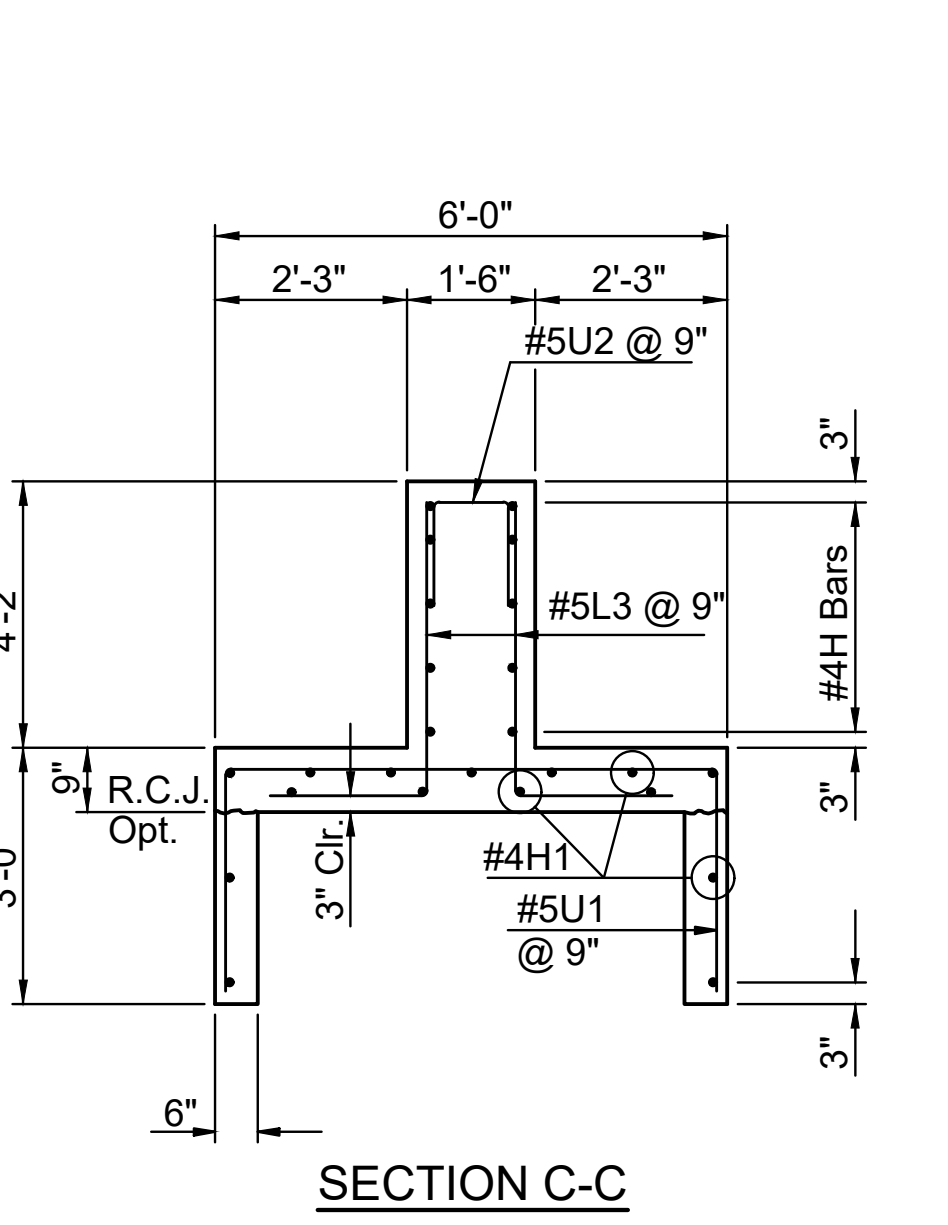
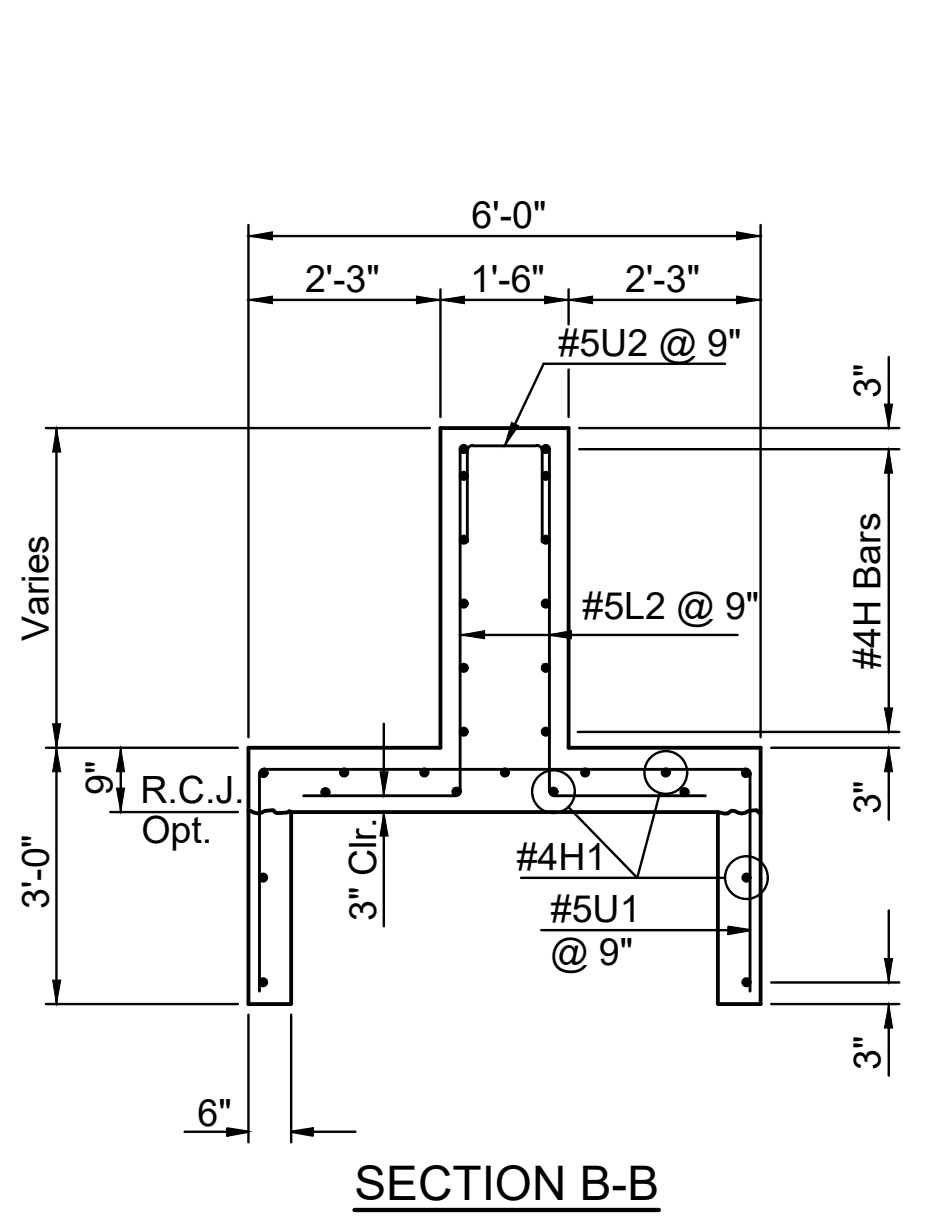
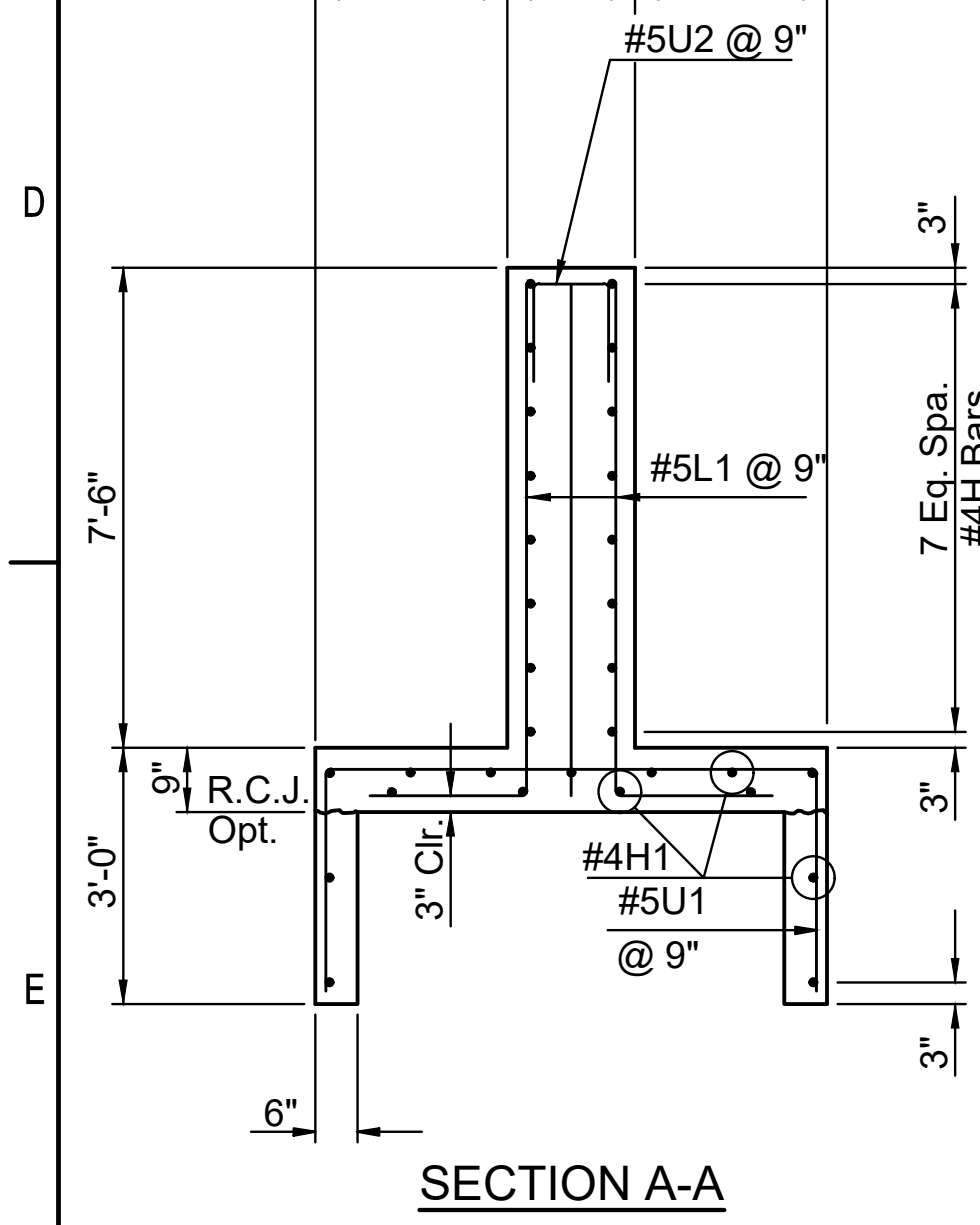
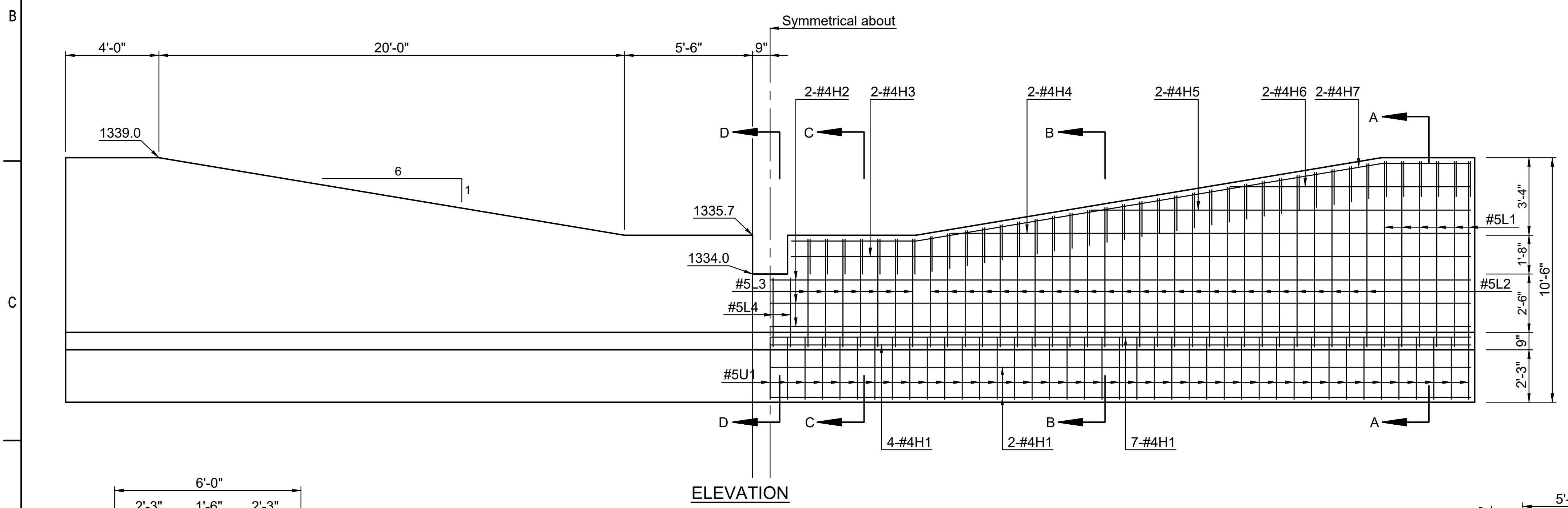
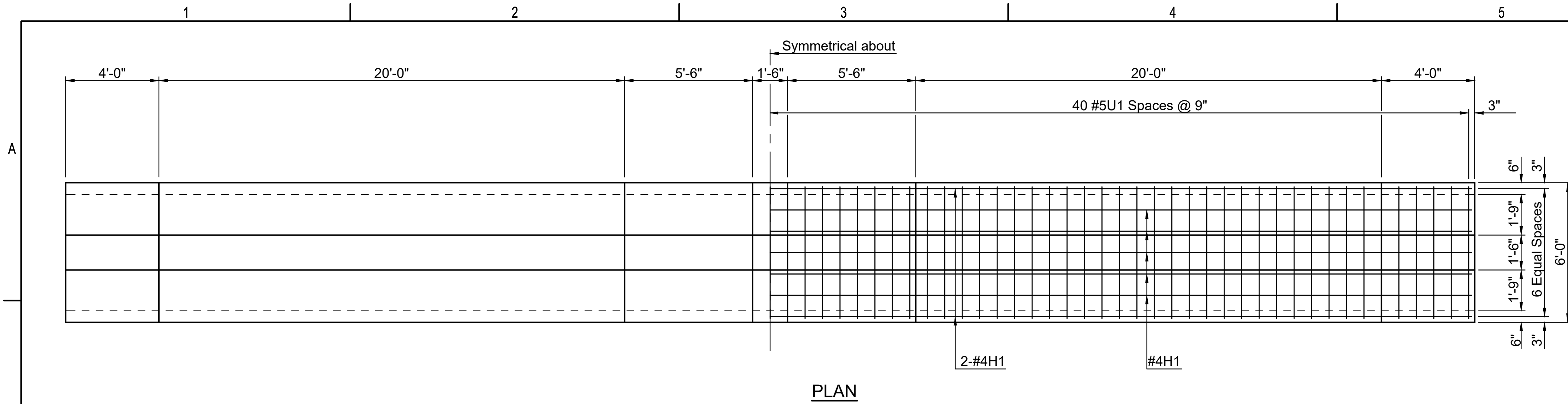
STORMWATER DRAIN #530
 TO SERVE
BRIDGER PAWNEE ADDITION
 CITY OF WICHITA, KANSAS
 PAUL GUNZELMAN, P.E., CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 458-2024-085576

Issue:		

JOB NO.	230656-006
DATE	DECEMBER 2024
PM	KPG
DESIGNED BY	HJW
DRAWN BY	BJJ
CHECKED BY	KMS

POND OUTFALL - EAST

SAVED 12/23/2024 6:58:58 AM BY BILL SEXSON
 PLOTTED 12/26/2024 10:55:14 AM BY BRADLEY HAYNES
 U:\WICHITA-CIVIL\2023\230656\02\2PD4_PLANS\030\SWD\230656-002-CG205 WEIR DETAILS.DWG



BILL OF MATERIALS					
REINFORCING STEEL					
Straight Bars			Bent Bars		
Mark	No.	Size	Length	Mark	Size
H1	30	#4	30'-9"	L1	24 #5 9'-7"
H2	12	#4	30'-9"	L2	108 #5 *
H3	4	#4	29'-0"	L3	28 #5 6'-3"
H4	4	#4	21'-9"	L4	8 #5 7'-7"
H5	4	#4	15'-9"		
H6	4	#4	9'-9"	H7	4 #4 29'-3"
				U1	81 #5 11'-0"
				U2	78 #5 4'-2"

* See Bending Diagrams

SUMMARY OF QUANTITIES #		
ITEM	QUANTITY	UNIT
Concrete	35.0	C.Y.
Reinforcing Steel	3794	Lbs.

For Information Only

GENERAL NOTES

UNIT STRESSES:
 CONCRETE: $F_c=4,000$ P.S.I., $F_y=60,000$ P.S.I.
 $F_c=1,600$ P.S.I., $F_s=24,000$ P.S.I.

CONCRETE: Concrete shall have a minimum 28 day compressive strength of 4,000 P.S.I. Bevel all exposed edges with a 3/4" triangular mounding, unless otherwise noted.

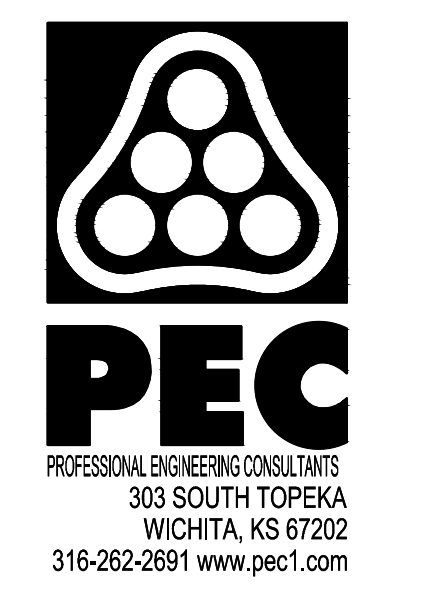
REINFORCING STEEL: All reinforcing steel shall conform to ASTM Designation A615 Grade 60 and shall be epoxy-coated. All dimensions relative to reinforcing are to centerline of bars unless otherwise noted. Bar bending and dimensions shall be as shown and noted on the bar bending diagrams. The concrete cover for all reinforcing shall be a minimum of 2" unless otherwise noted.

JOINTS: Construction joints shall only be formed at locations shown or as approved by the Engineer.

BASIS OF PAYMENT

The "R.C. Weir" shall be paid as a lump sum which shall include all labor, material, excavation, concrete, reinforcing steel and all other incidentals necessary to complete the work. Quantities shown are for information only.

LEGEND:
 R.C.J. = Roughened Construction Joint



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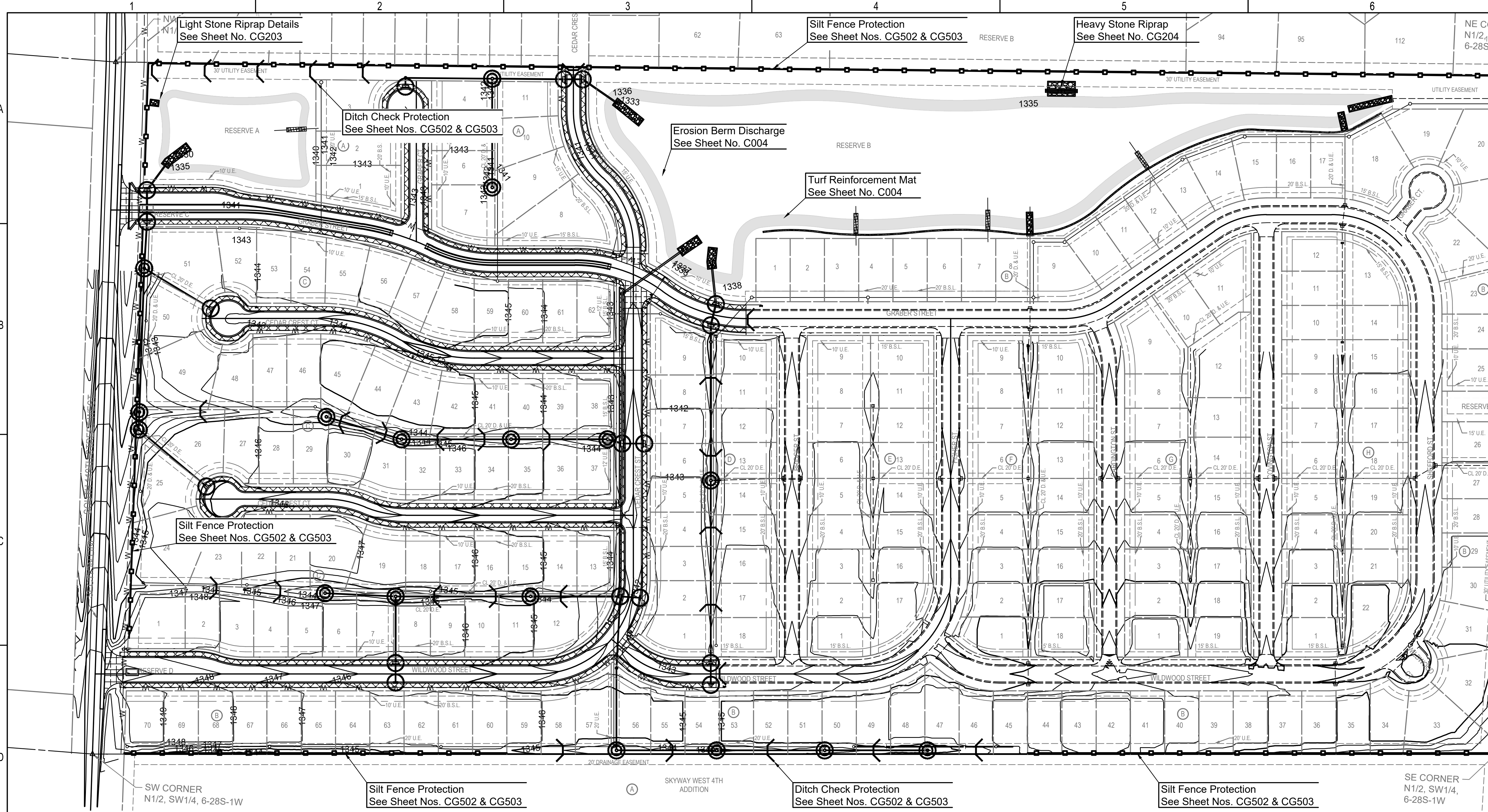
Issue:	

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CHECKED BY	KMS

WEIR DETAILS

CG205
18 OF 26

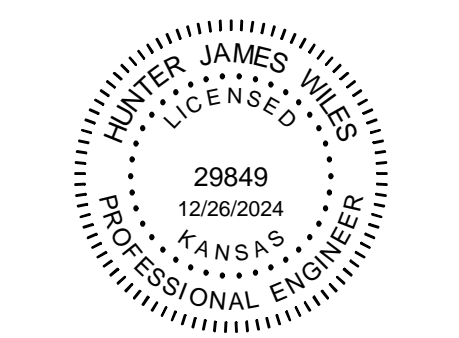
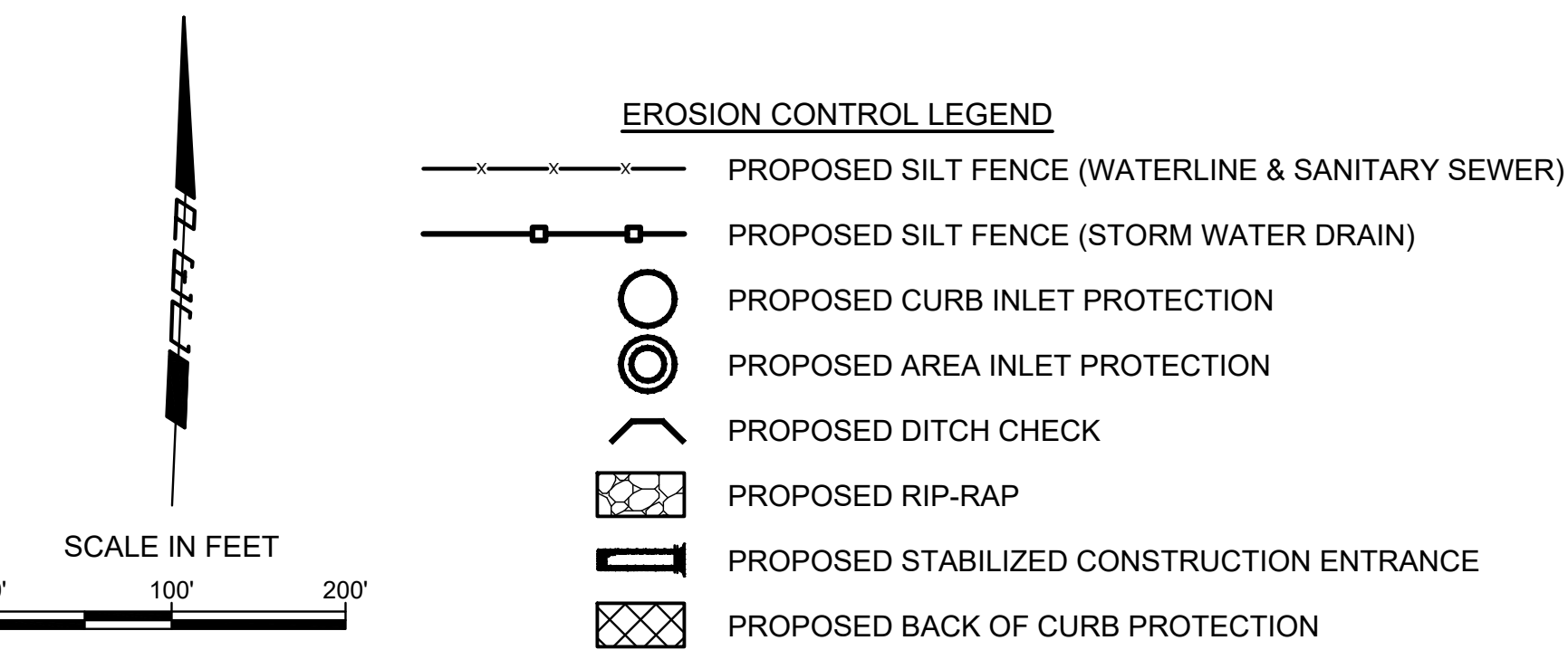
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GENERAL NOTES

- CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION PROTECTION THROUGHOUT THE ENTIRE PROJECT. THE FOLLOWING QUANTITIES ARE PROVIDED FOR INFORMATION ONLY.

PAVING (472-2024-086045)	17	EACH
CURB INLET PROTECTION	17	EACH
BACKYARD INLET PROTECTION	10,342	LF
BACK OF CURB PROTECTION		
STORM WATER DRAIN (458-2024-085576)	28	EACH
DITCH CHECK PROTECTION	5,440	LF
SILT FENCE PROTECTION	439	SY
EROSION BERM DISCHARGE	8,780	SY
TURF REINFORCEMENT MAT	225	SY
LIGHT STONE RIPRAP	129	SY
HEAVY STONE RIPRAP		
SANITARY SEWER (468-2024-016910)	2	LF
CONSTRUCTION ENTRANCE		
- THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED MINIMUM STANDARDS. WHENEVER SEDIMENT ENTERS THE STREETS, STORM SEWERS, DITCHES, OR PONDS, CONTRACTOR WILL INSTALL ADDITIONAL DEVICES, AS NEEDED, TO CORRECT THE PROBLEM.
- THE EROSION CONTROL DEVICES SHOWN HEREON MUST BE IN PLACE AT ALL TIMES DURING CONSTRUCTION UNTIL SUCH TIME AS THE SITE IS REESTABLISHED WITH PAVING OR GRASS. TEMPORARY OR PERMANENT SEEDING AND MULCH WILL BE INSTALLED WHEN EARTHWORK ACTIVITIES CEASE IN AN AREA FOR 14 DAYS OR MORE.
- ANY MUD INADVERTENTLY TRACKED ONTO ANY STREET SHALL BE CLEANED UP BY THE CONTRACTOR, AT THE END OF EACH DAY'S WORK, OR AS DIRECTED BY THE FIELD ENGINEER.
- CONTRACTOR TO FURNISH A TRUCK WASH-OUT PIT TO BE PLACED AT A CONVENIENT LOCATION THAT DOES NOT CONFLICT WITH CONSTRUCTION. CONTRACTOR SHALL CLEAN OUT AND BACKFILL PIT PRIOR TO FINAL INSPECTION. LOCATION SHALL BE APPROVED BY THE FIELD ENGINEER.

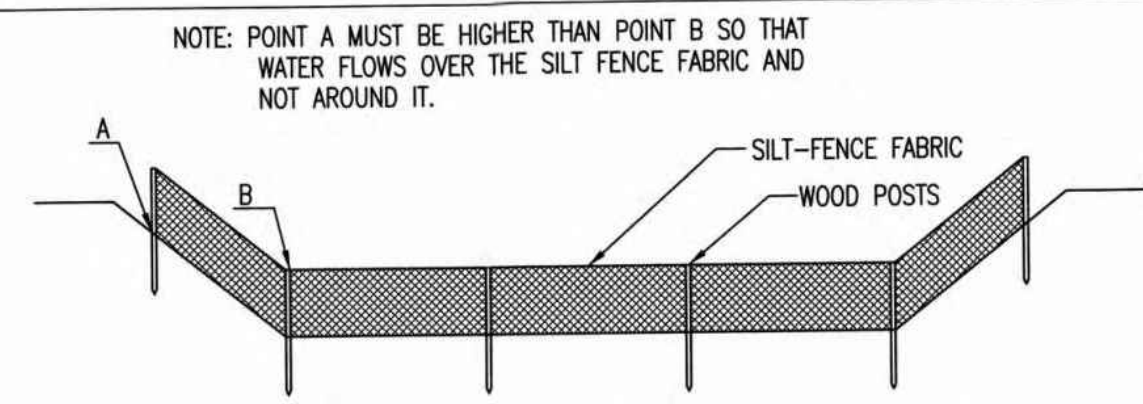


STORMWATER DRAIN #530
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Issue:	

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EROSION CONTROL PLANS



ELEVATION
SILT FENCE DITCH CHECKS
(STREAM PROTECTION)

MATERIAL SPECIFICATION:
SILT FENCE FABRIC SHOULD CONFORM TO THE ASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:
PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK, NOT OVER IT. SILT FENCE DITCH CHECKS OFTEN FAIL WHEN OVERTOPPED. SILT FENCE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE SILT FENCE SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE TOP OF THE LOW POINT OF THE FENCE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. SILT FENCE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. SILT FENCE SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED.

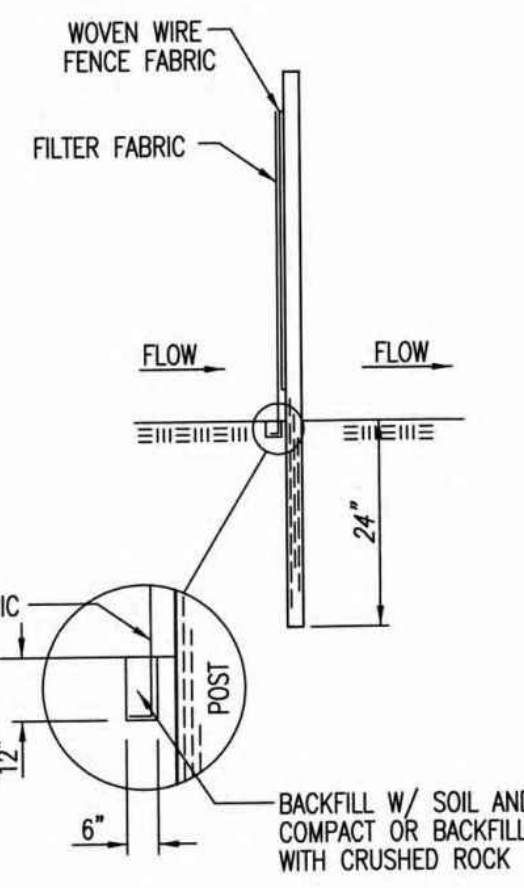
THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH CHECK DITCH GRADE (%)	SPACING CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

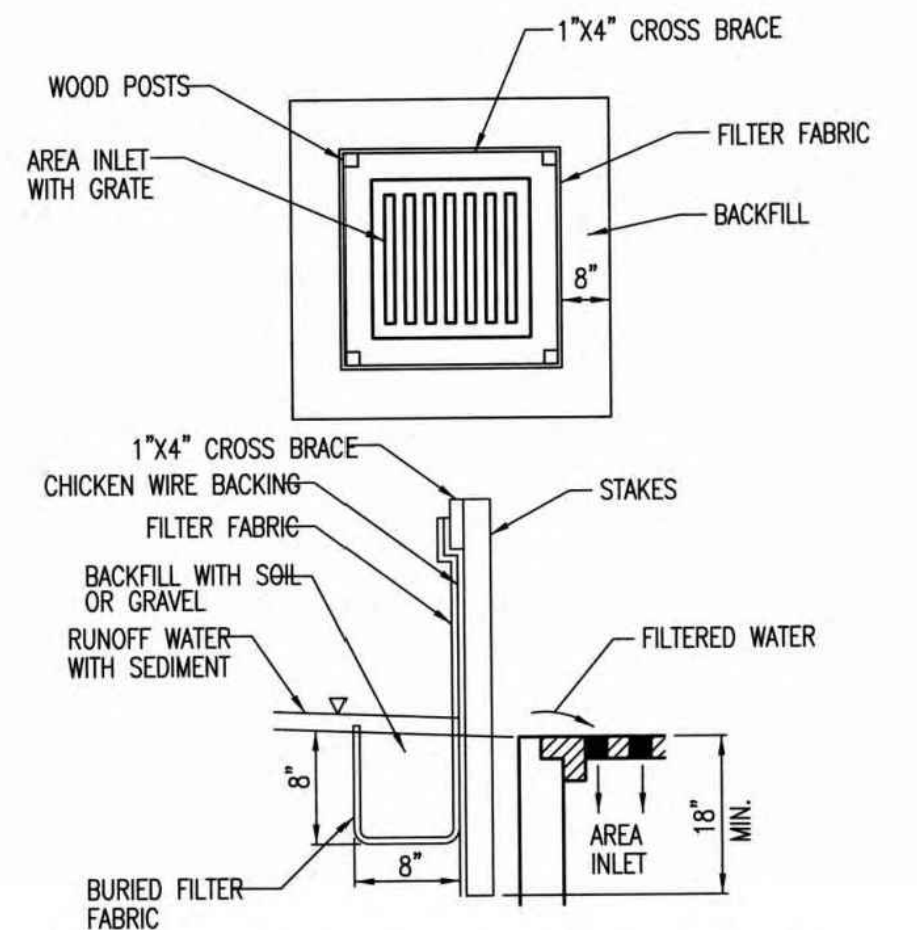
PROPER INSTALLATION METHOD:
EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS AT LEAST 12" DEEP BY 6" WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSLOPE SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSLOPE EDGE OF THE TRENCH. LINE TWO SIDES OF THE TRENCH WITH THE FABRIC AS SHOWN ON DETAIL. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE ON THE UPSLOPE SIDE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSLOPE OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 24". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:
WATER SHOULD FLOW THROUGH A SILT FENCE DITCH CHECK—NOT OVER IT. PLACE SILT FENCE IN DITCHES WHERE IT IS UNLIKELY THAT IT WILL BE OVERTOPPED. SILT FENCE INSTALLATIONS QUICKLY DETERIORATE WHEN WATER OVERTOPS THEM. DO NOT PLACE SILT FENCE POSTS ON THE UPSLOPE SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT PLACE A SILT FENCE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE SILT FENCE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS. DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE FENCE IS HIGHER THAN THE LOW POINT ON THE TOP OF THE FENCE. DO NOT PLACE SILT FENCE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT.

INSPECTION AND MAINTENANCE:
SILT FENCE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:
DOES WATER FLOW AROUND THE DITCH CHECK?
DOES WATER FLOW UNDER THE DITCH CHECK?
DOES THE SILT FENCE SAG EXCESSIVELY?
HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



ANCHOR TRENCH DETAIL



SILT FENCE BARRIERS FOR AREA INLETS
(INLET PROTECTION)

MATERIAL SPECIFICATION:
SILT FENCE FABRIC SHOULD CONFORM TO THE ASHTO M288 96 SILT FENCE SPECIFICATION. THE WIRE OR POLYMERIC MESH BACKING USED TO HELP SUPPORT THE SILT FENCE FABRIC SHOULD CONFORM TO THE ASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. THE MATERIAL USED TO FRAME THE TOPS OF THE POSTS SHOULD BE 1" BY 4" BOARDS. SILT FENCE FABRIC AND SUPPORT BACKING SHOULD BE ATTACHED TO THE WOODEN POSTS AND FRAME WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

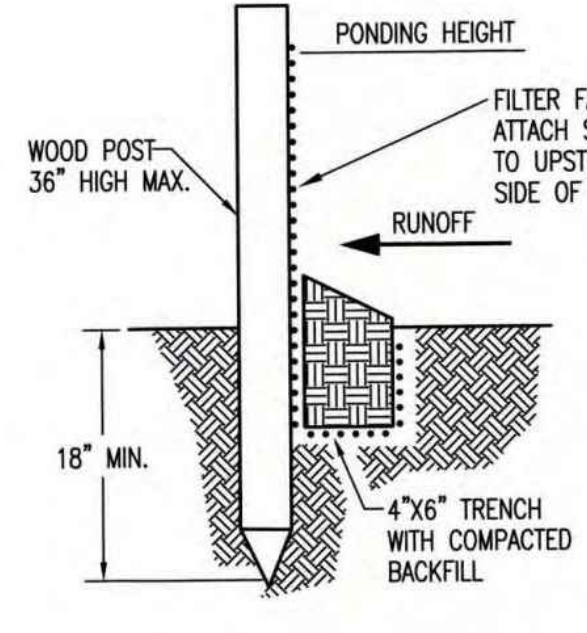
PLACEMENT:
PLACE A SILT FENCE DROP INLET BARRIER IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. WATER SHOULD FLOW THROUGH SILT FENCE, NOT OVER IT. SILT FENCE BARRIERS FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. WHEN USED AS A BARRIER FOR AREA INLETS, SILT FENCE FABRIC AND POSTS MUST BE SUPPORTED AT THE TOP BY A WOODEN FRAME. WHEN A SILT FENCE BARRIER FOR AREA INLETS IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRASTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:
EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 8" DEEP BY 8" WIDE. DRIVE POSTS TO A DEPTH OF AT LEAST 18" AROUND THE PERIMETER OF THE AREA INLET. THE DISTANCE BETWEEN POSTS SHOULD BE 4' OR LESS. IF THE DISTANCE BETWEEN TWO ADJACENT CORNER POSTS IS MORE THAN 4', ADD ANOTHER POST(S) BETWEEN THEM. CONNECT THE TOPS OF ALL THE POSTS WITH A WOODEN FRAME MADE OF 1" BY 4" BOARDS. USE NAILS OR SCREWS FOR FASTENING. ATTACH THE WIRE OR POLYMERIC-MESH BACKING TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC LONG ENOUGH TO WRAP AROUND THE PERIMETER OF THE AREA INLET. ADD MORE LENGTH FOR OVERLAPPING THE FABRIC JOINT. PLACE THE EDGE OF THE FABRIC IN THE TRENCH, STARTING AT THE OUTSIDE EDGE OF THE TRENCH. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT FENCE FABRIC SHOULD REMAIN EXPOSED. ATTACH THE SILT FENCE TO THE OUTSIDE OF THE POST/FRAME STRUCTURE WITH STAPLES, WIRE, ZIP TIES, OR NAILS. THE JOINT SHOULD BE OVERLAPPED TO THE NEXT POST.

NOTE: WHEN A SILT FENCE BARRIER FOR AREA INLET IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:
WATER SHOULD FLOW THROUGH A SILT FENCE BARRIER FOR AREA INLET—NOT OVER IT. PLACE A SILT FENCE BARRIER FOR AREA INLET IN A LOCATION WHERE IT IS UNLIKELY TO BE OVERTOPPED. SILT FENCE BARRIER FOR AREA INLETS OFTEN FAIL WHEN REPEATEDLY OVERTOPPED. DO NOT PLACE POSTS ON THE OUTSIDE OF THE SILT FENCE BARRIER FOR AREA INLET. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT INSTALL SILT FENCE BARRIER FOR AREA INLETS WITHOUT DIRECTIONING THE TOP OF THE POSTS. THE CORNER POSTS AROUND AREA INLETS ARE STRESSED IN TWO DIRECTIONS WHEREAS A NORMAL SILT FENCE IS ONLY STRESSED IN ONE DIRECTION. THIS ADDED STRESS REQUIRES MORE SUPPORT.

INSPECTION AND MAINTENANCE:
SILT FENCE BARRIER FOR AREA INLETS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:
DOES WATER FLOW UNDER THE SILT FENCE?
DOES THE SILT FENCE SAG EXCESSIVELY?
HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



SILT FENCE BARRIERS

MATERIAL SPECIFICATION:
SILT FENCE FABRIC SHOULD CONFORM TO THE ASHTO M288 96 SILT FENCE SPECIFICATION. THE POSTS USED TO SUPPORT THE SILT FENCE FABRIC SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. SILT FENCE FABRIC SHOULD BE ATTACHED TO THE WOODEN POSTS WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

PLACEMENT:
A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT. WHEN PRACTICABLE, SILT FENCE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. SILT FENCE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:
EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 6" DEEP BY 4" WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. ROLL OUT A CONTINUOUS LENGTH OF SILT FENCE FABRIC ON THE DOWNSLOPE SIDE OF THE TRENCH. PLACE THE EDGE OF THE FABRIC IN THE TRENCH STARTING AT THE TOP UPSLOPE EDGE. LINE ALL THREE SIDES OF THE TRENCH WITH THE FABRIC. BACKFILL OVER THE FABRIC IN THE TRENCH WITH THE EXCAVATED SOIL AND COMPACT. AFTER FILLING THE TRENCH, APPROXIMATELY 24" TO 36" OF SILT-FENCE FABRIC SHOULD REMAIN EXPOSED. LAY THE EXPOSED SILT FENCE UPSLOPE OF THE TRENCH TO CLEAR AN AREA FOR DRIVING IN THE POSTS. JUST DOWNSLOPE OF THE TRENCH, DRIVE POSTS INTO THE GROUND TO A DEPTH OF AT LEAST 18". PLACE POSTS NO MORE THAN 4' APART. ATTACH THE SILT FENCE TO THE ANCHORED POST WITH STAPLES, WIRE, ZIP TIES, OR NAILS.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:
WHEN PRACTICABLE, DO NOT PLACE SILT FENCE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. WHEN THE FLOW CONCENTRATES, IT OVERTOPS THE BARRIER AND THE SILT FENCE SLOPE BARRIER QUICKLY DETERIORATES. DO NOT PLACE SILT-FENCE POSTS ON THE UPSLOPE SIDE OF THE SILT FENCE FABRIC. IN THIS CONFIGURATION, THE FORCE OF THE WATER IS NOT RESTRICTED BY THE POSTS, BUT ONLY BY THE STAPLES (WIRE, ZIP TIES, NAILS, ETC.). THE SILT FENCE WILL RIP AND FAIL. DO NOT PLACE SILT FENCE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT SUFFICIENTLY ANCHORED, IT WILL WASH OUT. SILT FENCE SLOPE BARRIERS MUST BE DUG INTO THE GROUND—SILT FENCE AT GROUND LEVEL DOES NOT WORK BECAUSE WATER WILL FLOW UNDERNEATH.

INSPECTION AND MAINTENANCE:
SILT FENCE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

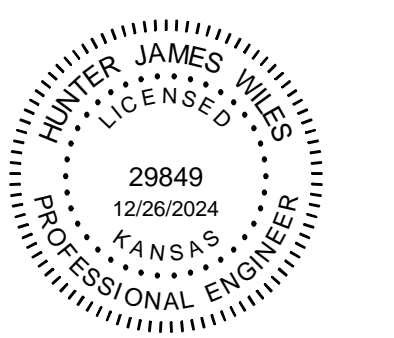
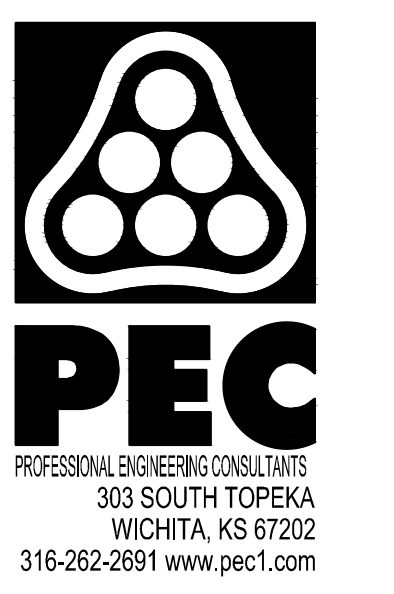
ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
DOES WATER FLOW UNDER THE SLOPE BARRIER?
DO THE SILT FENCES SAG EXCESSIVELY?
HAS THE SILT FENCE TORN OR BECOME DETACHED FROM THE POSTS?
DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

REVISION DATE: MAY 2013

SILT FENCE DITCH CHECK AND BARRIER DETAILS

CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE		SHEET
CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		



STORMWATER DRAIN #530 TO SERVE

BRIDGER PAWNEE ADDITION

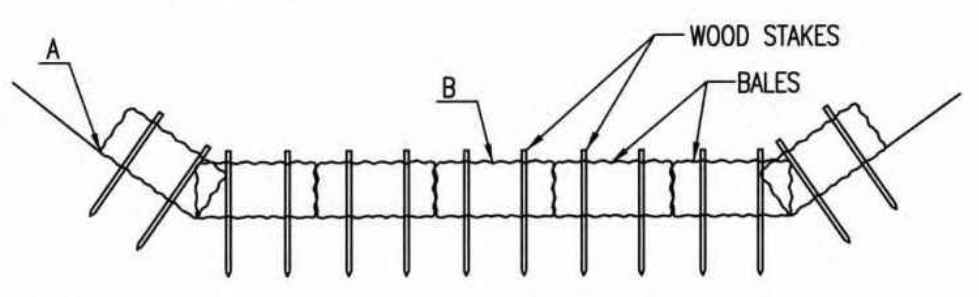
CITY OF WICHITA, KANSAS
PAUL GUNZELMAN, P.E.-CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085576

Issue:	
JOB NO.	230656-006
DATE	DECEMBER 2024
PM	KPG
DESIGNED BY	HJW
DRAWN BY	BSJ
CHECKED BY	KMS

SILT FC DT CHECK AND BARR DTLs

SAVED 11/19/2024 4:36:24 PM BY HUNTER, WILES
PLOTTED 12/26/2024 10:56:03 AM BY BRADLEY, HAYNES
U:\WICHITA-CIVIL\2023\230656\02\2PD4_PLANS\03\01\SWID\230656-006-CG501 BMP DETAILS.DWG

NOTE: POINT A MUST BE HIGHER THAN POINT B SO THAT WATER FLOWS OVER THE BALES AND NOT AROUND THEM.



STRAW BALE DITCH CHECKS

MATERIAL SPECIFICATION:

BALE DITCH CHECKS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. OPTIONAL: THE DOWNSTREAM SCOUR APRON SHOULD BE CONSTRUCTED OF A DOUBLE-NETTED STRAW EROSION-CONTROL BLANKET AT LEAST 6' WIDE. OPTIONAL: THE METAL LANDSCAPE STAPLES USED TO ANCHOR THE EROSION-CONTROL BLANKET SHOULD BE AT LEAST 8" LONG.

PLACEMENT:

BALE DITCH CHECKS SHOULD BE PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. THE DITCH CHECK SHOULD EXTEND FAR ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE. THIS PREVENTS WATER FROM FLOWING AROUND THE CHECK. STRAW BALE DITCH CHECKS SHOULD NOT BE PLACED IN DITCHES WHERE HIGH FLOWS ARE EXPECTED. ROCK CHECKS SHOULD BE USED INSTEAD. BALES SHOULD BE PLACED IN DITCHES WITH SLOPES OF 6% OR LESS. FOR SLOPES STEEPER THAN 6%, ROCK CHECKS SHOULD BE USED. THE FOLLOWING TABLE PROVIDES CHECK SPACING FOR A GIVEN DITCH GRADE:

DITCH GRADE (%)	CHECK SPACING (FEET)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH PERPENDICULAR TO THE DITCH FLOWLINE THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. EXTEND THE TRENCH IN A STRAIGHT LINE ALONG THE ENTIRE LENGTH OF THE PROPOSED DITCH CHECK. PLACE THE SOIL ON THE UPSTREAM SIDE OF THE TRENCH-IT WILL BE USED LATER. OPTIONAL: ON THE DOWNSTREAM SIDE OF THE TRENCH, ROLL OUT A LENGTH OF EROSION-CONTROL BLANKET (SCOUR APRON) EQUAL TO THE LENGTH OF THE TRENCH. PLACE THE UPSTREAM EDGE OF THE EROSION-CONTROL BLANKET ALONG THE BOTTOM UPSTREAM EDGE OF THE TRENCH. THE EROSION CONTROL BLANKET SHOULD BE ANCHORED IN THE TRENCH WITH ONE ROW OF 8" LANDSCAPE STAPLES PLACED ON 18" CENTERS. THE REMAINDER OF THE EROSION-CONTROL BLANKET (THE PORTION THAT IS NOT LYING IN THE TRENCH) WILL SERVE AS THE DOWNSTREAM SCOUR APRON. THIS SECTION OF THE BLANKET SHOULD BE ANCHORED TO THE GROUND WITH 8" LANDSCAPE STAPLES PLACED AROUND THE PERIMETER OF THE BLANKET ON 18" CENTERS. THE REMAINDER OF THE BLANKET SHOULD BE ANCHORED USING TWO EVENLY SPACED ROWS OF 8" LANDSCAPE STAPLES ON 18" CENTERS PLACED PERPENDICULAR TO THE FLOWLINE OF THE DITCH. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSTREAM SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP AND EXTEND UPSTREAM NO MORE THAN 24".

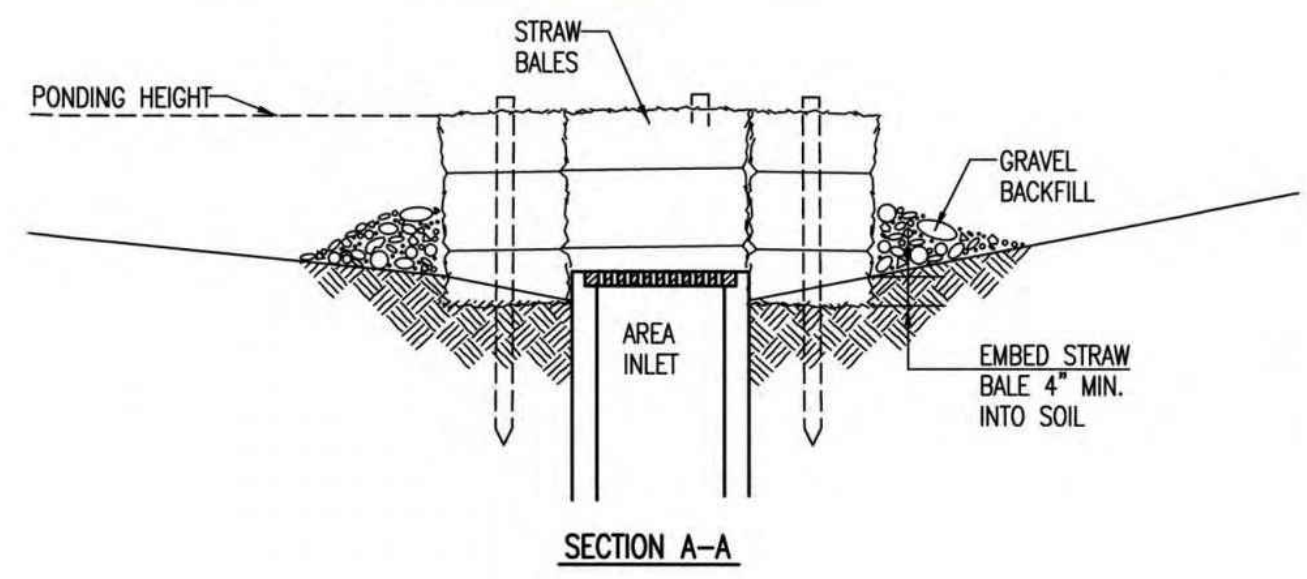
LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

DO NOT PLACE A BALE DITCH CHECK DIRECTLY IN FRONT OF A CULVERT OUTLET. IT WILL NOT STAND UP TO THE CONCENTRATED FLOW. DO NOT PLACE BALE DITCH CHECKS IN DITCHES THAT WILL LIKELY EXPERIENCE HIGH FLOWS. THEY WILL NOT STAND UP TO CONCENTRATED FLOW. FOLLOW PRESCRIBED DITCH-CHECK SPACING GUIDELINES. IF SPACING GUIDELINES ARE EXCEEDED, EROSION WILL OCCUR BETWEEN THE DITCH CHECKS. DO NOT ALLOW WATER TO FLOW AROUND THE DITCH CHECK. MAKE SURE THAT THE DITCH CHECK IS LONG ENOUGH SO THAT THE GROUND LEVEL AT THE ENDS OF THE CHECK IS HIGHER THAN THE TOP OF THE LOWEST CENTER BALE. DO NOT PLACE BALE DITCH CHECKS IN CHANNELS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE CHECK IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT. BALE DITCH CHECKS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE CHECK.

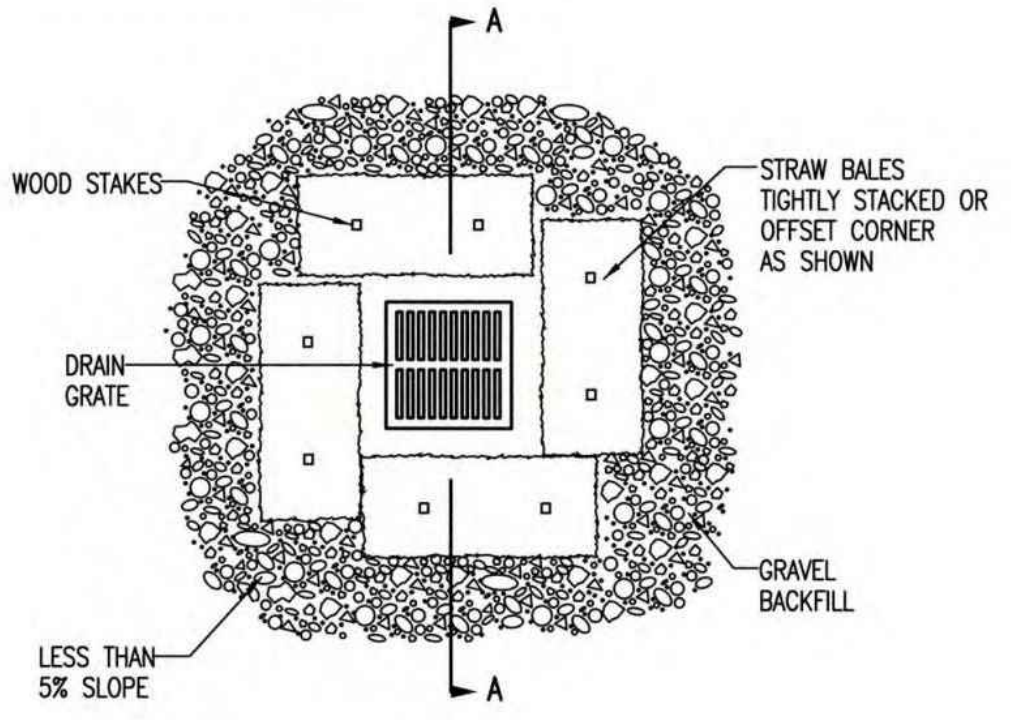
INSPECTION AND MAINTENANCE:

BALE DITCH CHECKS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW AROUND THE DITCH CHECK?
- DOES WATER FLOW UNDER THE DITCH CHECK?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES AND/OR SCOUR APRONS (OPTIONAL) DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE DITCH CHECK?



SECTION A-A



STRAW BALE BARRIERS FOR AREA INLETS (INLET PROTECTION)

MATERIAL SPECIFICATION:

BALE AREA INLET BARRIERS SHOULD BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

BALE AREA INLET BARRIERS SHOULD BE PLACED DIRECTLY AROUND THE PERIMETER OF A DROP INLET. WHEN A BALE AREA INLET BARRIER IS LOCATED NEAR AN INLET THAT HAS STEEP APPROACH SLOPES, THE STORAGE CAPACITY BEHIND THE BARRIER IS DRASTICALLY REDUCED. TIMELY REMOVAL OF SEDIMENT MUST OCCUR FOR A BARRIER TO OPERATE PROPERLY IN THIS LOCATION.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH AROUND THE PERIMETER OF THE AREA INLET THAT IS AT LEAST 4" DEEP BY A BALE'S WIDTH WIDE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. SOME BALES MAY NEED TO BE SHORTENED TO FIT INTO THE TRENCH AROUND THE AREA INLET. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE RECEIVING SIDE OF THE BARRIER AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP. NOTE: WHEN A BALE AREA INLET BARRIER IS PLACED IN A SHALLOW MEDIAN DITCH, MAKE SURE THAT THE TOP OF THE BARRIER IS NOT HIGHER THAN THE PAVED ROAD. IN THIS CONFIGURATION, WATER MAY SPREAD ONTO THE ROADWAY CAUSING A HAZARDOUS CONDITION.

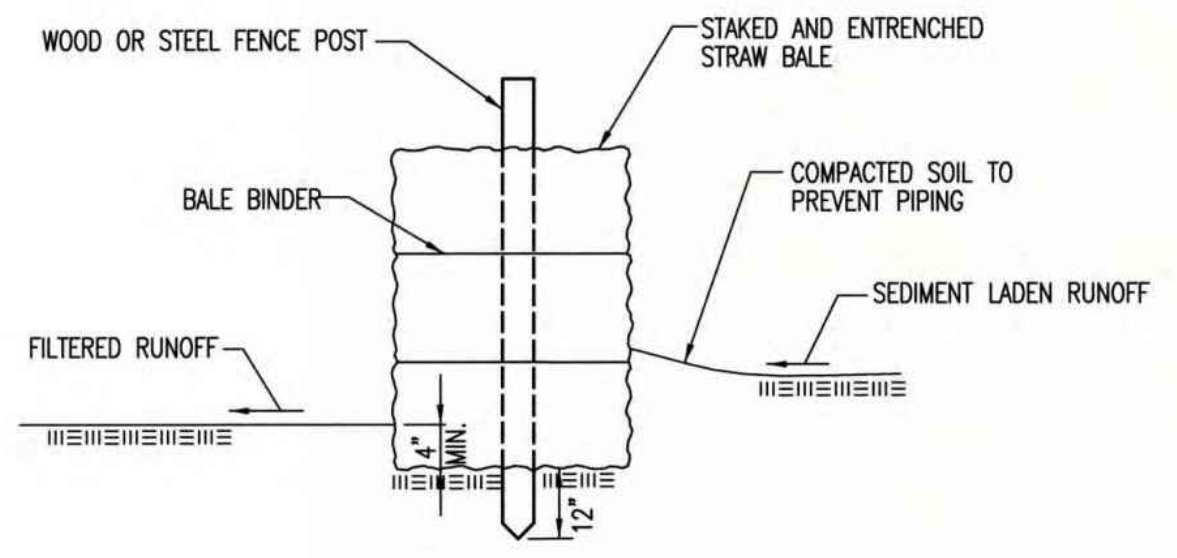
LIST OF COMMON PLACEMENT INSTALLATION MISTAKES TO AVOID:

BALES SHOULD BE PLACED DIRECTLY AGAINST THE PERIMETER OF THE AREA INLET. THIS ALLOWS OVERTOPPING WATER TO FLOW DIRECTLY INTO THE INLET INSTEAD OF ONTO NEARBY SOIL CAUSING SCOUR. BALE AREA INLET BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:

BALE AREA INLET BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- DOES WATER FLOW UNDER THE AREA INLET BARRIER?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE AREA INLET BARRIER?



STRAW BALE BARRIERS

MATERIAL SPECIFICATION:

BALE SLOPE BARRIERS MAY BE CONSTRUCTED OF WHEAT STRAW, OAT STRAW, PRAIRIE HAY, OR BROMEGRASS HAY THAT IS FREE OF WEEDS DECLARED NOXIOUS BY THE KANSAS STATE BOARD OF AGRICULTURE. THE STAKES USED TO ANCHOR THE BALES SHOULD BE A HARDWOOD MATERIAL WITH THE FOLLOWING MINIMUM DIMENSIONS: 2" SQUARE (NOMINAL) BY 4' LONG. TWINE SHOULD BE USED TO BIND BALES. THE USE OF WIRE BINDING IS PROHIBITED BECAUSE IT DOES NOT BIODEGRADE READILY.

PLACEMENT:

A SLOPE BARRIER SHOULD BE USED AT THE TOE OF A SLOPE WHEN A DITCH DOES NOT EXIST. THE SLOPE BARRIER SHOULD BE PLACED ON NEARLY LEVEL GROUND 5' TO 10' AWAY FROM THE TOE OF A SLOPE. THE BARRIER IS PLACED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE ADEQUATE STORAGE FOR SETTLING OUT SEDIMENT. WHEN PRACTICABLE, BALE SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. BALE SLOPE BARRIERS CAN ALSO BE PLACED ALONG RIGHT-OF-WAY FENCE LINES TO KEEP SEDIMENT FROM CROSSING ONTO ADJACENT PROPERTY. WHEN PLACED IN THIS MANNER, THE SLOPE BARRIER WILL NOT LIKELY FOLLOW CONTOURS.

PROPER INSTALLATION METHOD:

EXCAVATE A TRENCH THE LENGTH OF THE PLANNED SLOPE BARRIER THAT IS 4" DEEP AND A BALE'S WIDTH WIDE. MAKE SURE THAT THE TRENCH IS EXCAVATED ALONG A SINGLE CONTOUR. WHEN PRACTICABLE, SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. PLACE THE SOIL ON THE UPSLOPE SIDE OF THE TRENCH FOR LATER USE. PLACE THE BALES IN THE TRENCH, MAKING SURE THAT THEY ARE BUTTED TIGHTLY. TWO STAKES SHOULD BE DRIVEN THROUGH EACH BALE ALONG THE CENTERLINE OF THE DITCH CHECK, APPROXIMATELY 6" TO 8" IN FROM THE BALE ENDS. STAKES SHOULD BE DRIVEN AT LEAST 12" INTO THE GROUND. ONCE ALL THE BALES HAVE BEEN INSTALLED AND ANCHORED, PLACE THE EXCAVATED SOIL AGAINST THE UPSLOPE SIDE OF THE CHECK AND COMPACT IT. THE COMPACTED SOIL SHOULD BE NO MORE THAN 3" TO 4" DEEP.

LIST OF COMMON PLACEMENT/INSTALLATION MISTAKES TO AVOID:

WHEN PRACTICAL, DO NOT PLACE BALE SLOPE BARRIERS ACROSS CONTOURS. SLOPE BARRIERS SHOULD BE PLACED ALONG CONTOURS TO AVOID A CONCENTRATION OF FLOW. CONCENTRATED FLOW OVER A SLOPE BARRIER CREATES A SCOUR HOLE ON THE DOWNSLOPE SIDE OF THE BARRIER. THE SCOUR HOLE EVENTUALLY UNDERMINES THE BALES AND THE BARRIER FAILS. DO NOT PLACE BALE SLOPE BARRIERS IN AREAS WITH SHALLOW SOILS UNDERLAIN BY ROCK. IF THE BARRIER IS NOT ANCHORED SUFFICIENTLY, IT WILL WASH OUT. BALE SLOPE BARRIERS MUST BE DUG INTO THE GROUND. BALES AT GROUND LEVEL DO NOT WORK BECAUSE THEY ALLOW WATER TO FLOW UNDER THE BARRIER.

INSPECTION AND MAINTENANCE:

BALE SLOPE BARRIERS SHOULD BE INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 1/2" OR MORE. THE FOLLOWING IS A LIST OF QUESTIONS THAT SHOULD BE ADDRESSED DURING EACH INSPECTION:

- ARE THERE ANY POINTS ALONG THE SLOPE BARRIER WHERE WATER IS CONCENTRATING?
- DOES WATER FLOW UNDER THE SLOPE BARRIER?
- DOES WATER FLOW THROUGH SPACES BETWEEN ABUTTING BALES?
- ARE ANY BALES DISLODGED?
- ARE BALES DECOMPOSING DUE TO AGE AND/OR WATER DAMAGE?
- DOES SEDIMENT NEED TO BE REMOVED FROM BEHIND THE SLOPE BARRIER?

REVISION DATE: MAY 2013



STRAW BALE DITCH CHECK AND BARRIER DETAILS

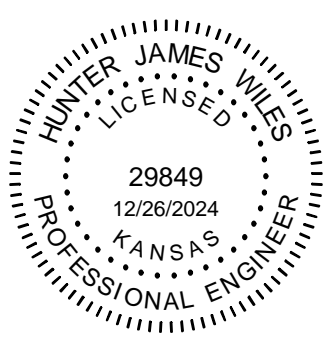
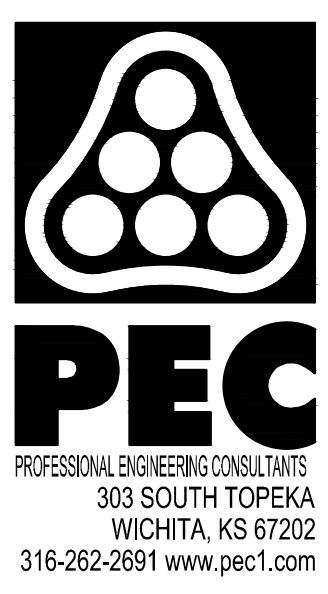
CITY ENGINEER
GARY JANZEN, P.E.

PROJECT NUMBER	OCA NUMBER	DATE

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

SHEET

SW-503



STORMWATER DRAIN #530 TO SERVE

BRIDGER PAWNEE ADDITION

CITY OF WICHITA, KANSAS
PAUL GUNZELMAN, P.E.-CITY ENGINEER
CITY OF WICHITA PROJECT NO. 458-2024-085576

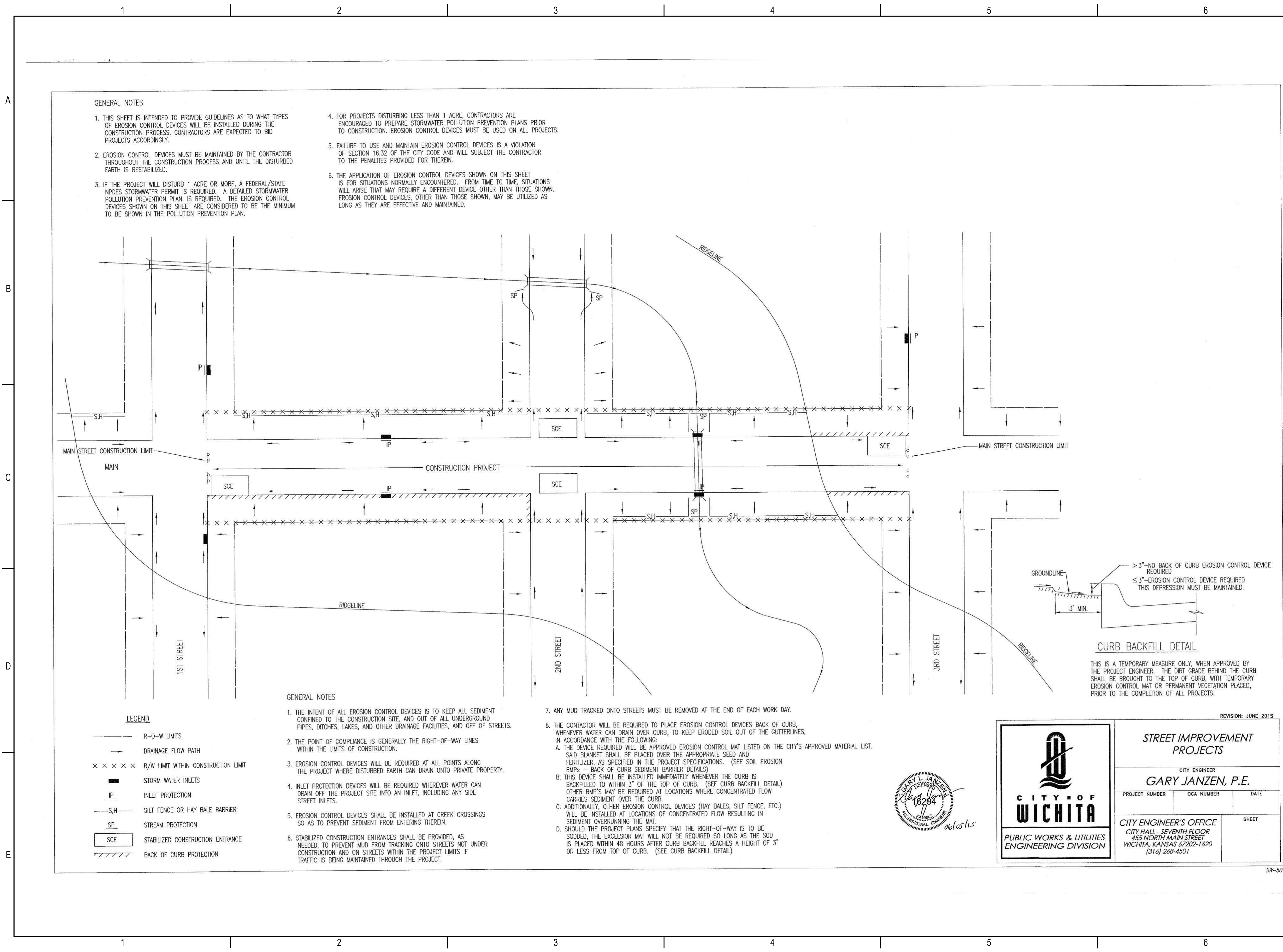
Issue:		

JOB NO.	230656-006
DATE	DECEMBER 2024
PM	KPG
DESIGNED BY	HJW
DRAWN BY	BJS
CHECKED BY	KMS

STRAW BALE DT CHECK AND BARR DTLS

SAVED 11/19/2024 4:36:24 PM BY HUNTER,WILES
 PLOTTED 12/26/2024 10:56:03 AM BY BRADLEY,HAYNES
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SAVED 11/19/2024 4:36:24 PM BY HUNTER WILES
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GENERAL NOTES

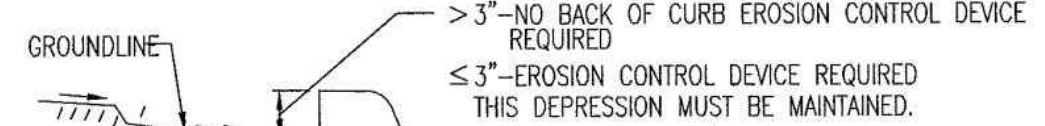
- THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF EROSION CONTROL DEVICES WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
- EROSION CONTROL DEVICES MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS AND UNTIL THE DISTURBED EARTH IS RESTABILIZED.
- IF THE PROJECT WILL DISTURB 1 ACRE OR MORE, A FEDERAL/STATE NPDES STORMWATER PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN, IS REQUIRED. THE EROSION CONTROL DEVICES SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SHOWN IN THE POLLUTION PREVENTION PLAN.
- FOR PROJECTS DISTURBING LESS THAN 1 ACRE, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION. EROSION CONTROL DEVICES MUST BE USED ON ALL PROJECTS.
- FAILURE TO USE AND MAINTAIN EROSION CONTROL DEVICES IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.
- THE APPLICATION OF EROSION CONTROL DEVICES SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT DEVICE OTHER THAN THOSE SHOWN. EROSION CONTROL DEVICES, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.

GENERAL NOTES

- THE INTENT OF ALL EROSION CONTROL DEVICES IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, LAKES, AND OTHER DRAINAGE FACILITIES, AND OFF OF STREETS.
- THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT-OF-WAY LINES WITHIN THE LIMITS OF CONSTRUCTION.
- EROSION CONTROL DEVICES WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.
- INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.
- EROSION CONTROL DEVICES SHALL BE INSTALLED AT CREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.
- STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.
- ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.
- THE CONTRACTOR WILL BE REQUIRED TO PLACE EROSION CONTROL DEVICES BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES, IN ACCORDANCE WITH THE FOLLOWING:
 - THE DEVICE REQUIRED WILL BE APPROVED EROSION CONTROL MAT LISTED ON THE CITY'S APPROVED MATERIAL LIST. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE SOIL EROSION BMPs - BACK OF CURB SEDIMENT BARRIER DETAILS)
 - THIS DEVICE SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL) OTHER BMPs MAY BE REQUIRED AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB.
 - ADDITIONALLY, OTHER EROSION CONTROL DEVICES (HAY BALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
 - SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODDED, THE EXCELSIOR MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE CURB BACKFILL DETAIL)

LEGEND

- R-O-W LIMITS
- DRAINAGE FLOW PATH
- × × × × R/W LIMIT WITHIN CONSTRUCTION LIMIT
- STORM WATER INLETS
- IP INLET PROTECTION
- S,H SILT FENCE OR HAY BALE BARRIER
- SP STREAM PROTECTION
- SCE STABILIZED CONSTRUCTION ENTRANCE
- /// BACK OF CURB PROTECTION



CURB BACKFILL DETAIL
 THIS IS A TEMPORARY MEASURE ONLY, WHEN APPROVED BY THE PROJECT ENGINEER. THE DIRT GRADE BEHIND THE CURB SHALL BE BROUGHT TO THE TOP OF CURB, WITH TEMPORARY EROSION CONTROL MAT OR PERMANENT VEGETATION PLACED, PRIOR TO THE COMPLETION OF ALL PROJECTS.

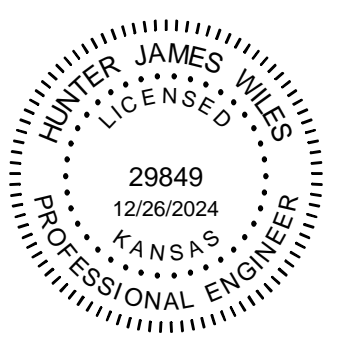


STREET IMPROVEMENT PROJECTS		
CITY ENGINEER GARY JANZEN, P.E.		
PROJECT NUMBER	OCA NUMBER	DATE
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		SHEET



REVISION: JUNE 2015

SW-504



STORMWATER DRAIN #530 TO SERVE
BRIDGER PAWNEE ADDITION
 CITY OF WICHITA, KANSAS
 PAUL GUNZELMAN, P.E. - CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 458-2024-085576

Issue:		

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STREET IMPROVEMENT PROJECTS

CG504
24 OF 26

